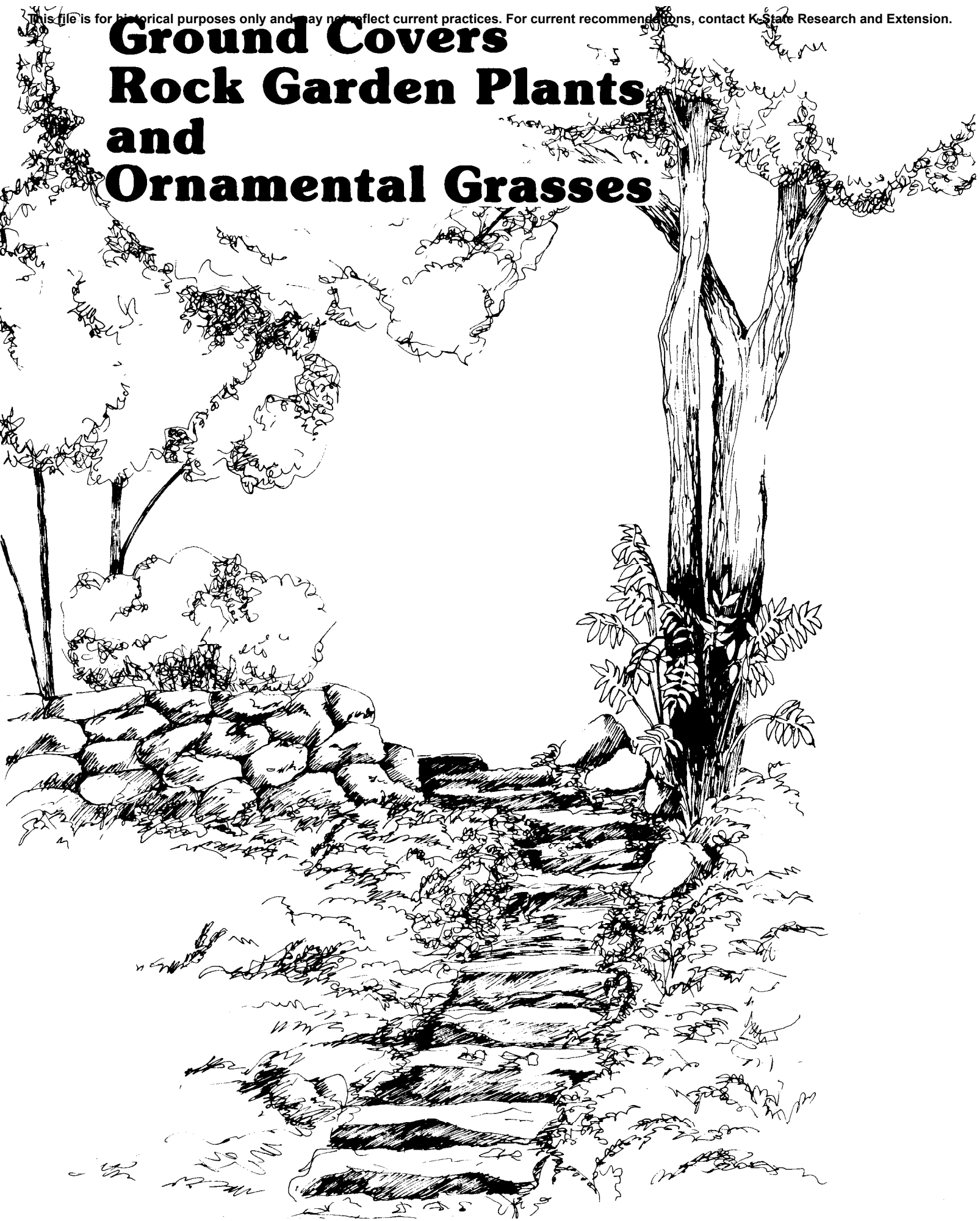
Ground Covers Rock Garden Plants and Ornamental Grasses



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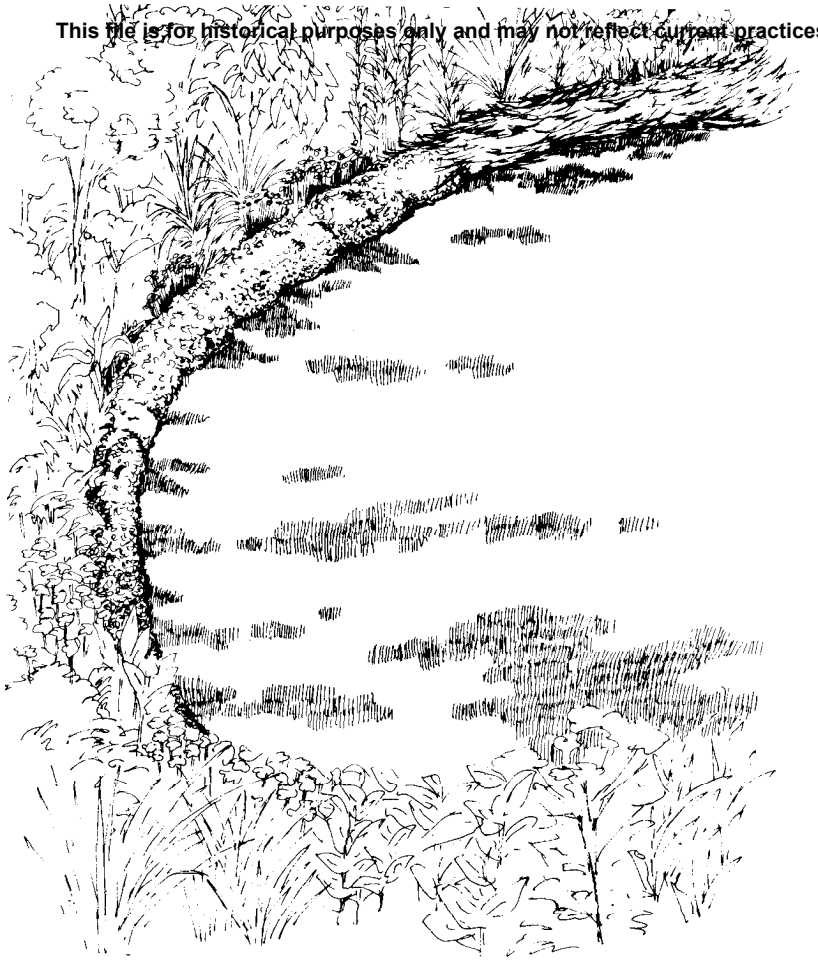


Figure 3. Groundcover used as a facer for a flower border.

Groundcovers in the Landscape

Groundcover plants can enhance your landscape, while minimizing some of the problems of mowing. Groundcovers are particularly valuable for areas where turf grass is difficult to maintain. Shaded areas under large trees or around those trees that have heavy surface feeding roots are the more common problem areas in our landscapes. **(Figure 1)** You might also consider planting steep banks to groundcovers, rather than constructing a retaining wall to hold the soil. **(Figure 2)**

Use a groundcover mulch such as woodchips wherever you can eliminate some hand weeding or clipping. Planting groundcover around trees can be helpful because it protects the tree from injury by the mower.

Groundcovers, including the prostrate Junipers, make an excellent facer for shrub and flower borders. **(Figure 3)** These are used effectively to give a smooth transition from the shrub to the grass. An effective design will include curving or sweeping lines, rather than straight borders. These groundcover areas will also allow mowing around the shrub borders without hand clipping. Groundcovers can break

Figure 2. Surrounding a lawn, banks planted to varied groundcovers create a very interesting place.

up an expanse of lawn and give it more form, particularly in shaded area when grass does not grow well. **(Figure 4)**

It must be remembered that groundcovers will not solve all of the problems of maintenance in your yard. Even though you may grow many of these plants in the shade where grass does not grow well, the groundcovers still require some attention.

Groundcover plants should be watered frequently, and occasionally may require spraying for insects or disease. Also, the groundcover plants will respond favorably to the application of nitrogen fertilizers periodically during the growing season. If the plants retain their leaves during the winter (such as *Mahonia* or the Junipers), you should water the plants in the winter also. This should be done when the weather is dry and the ground is not frozen. The larger groundcover plants also have a tendency to collect trash and paper that is blown in from the surrounding area. This will require some time to keep the area free from litter.

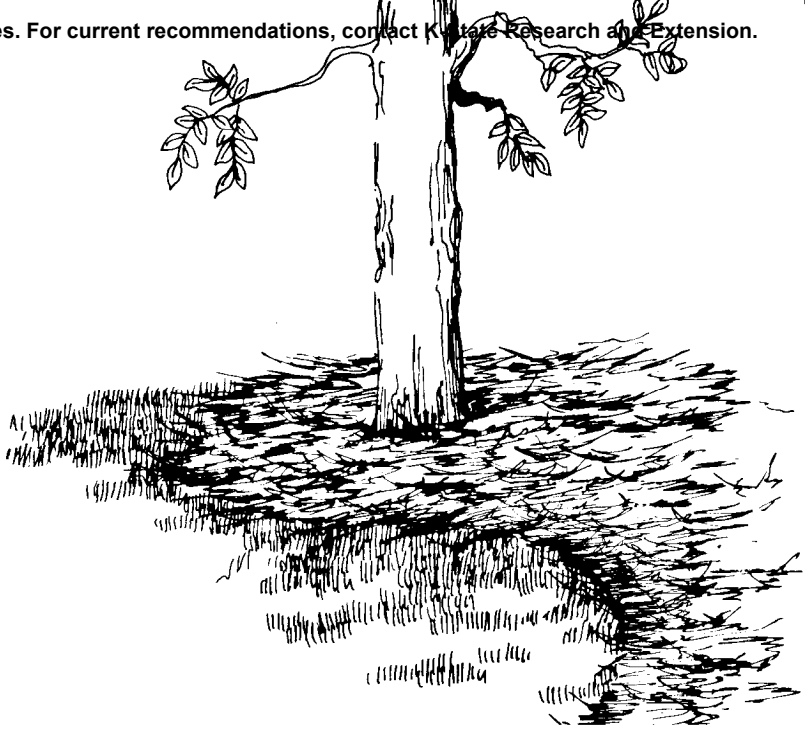


Figure 1. Groundcover around the base of a tree eliminates hand clipping and helps prevent mower damage.

Figure 4. Groundcovers can break up large expanse of lawn and create more form.

Planting Groundcover Plants

Select groundcover plants to suit your needs. If you are growing groundcovers instead of grass because the area is too shaded, then you must select plants that can tolerate heavy shade. Remember that steep banks especially those exposed to the southwest will accumulate very little soil moisture. Use plants that can withstand dry conditions on these banks. The creeping Junipers, Cotoneaster, or creeping Honeysuckle are most frequently used for this purpose.

The spacing of the plants will depend on how quickly you wish the area to be covered, the ultimate spread of the plant, and most important—your budget. Groundcover plants are generally much more expensive than grass. However, they are not more expensive than bark chip mulches. Before planning extensive areas to be planted to groundcover, you should check your retail trade lists for costs. Naturally, the closer the plants are spaced, the quicker the ground will be covered. A rough formula to figure the number of plants required is:

$$\frac{\text{Area to be covered in sq. ft.}}{(\text{Spacing of plants in ft.})^2} = \text{Number of plants required}$$

$$\frac{100 \text{ sq. ft.}}{(1.5)^2} = \frac{100}{2.25} = 44.4 \text{ or } 45 \text{ plants}$$

Example:

If you using *Vinca minor* at 18 inch spacings (1.5 ft.), and wish to cover an area of 100 square feet-you will need:

Normally, the smaller groundcovers are placed in a grid spacing of 12 inches, but this will depend on your requirements. **(Figure 5)** On slopes or banks, you will want to place the plants at even closer spacings, otherwise, the soil will become eroded before the groundcover is established. The durable groundcover listed that will become established well from seed is Crown Vetch although rooted plants are also available of this species.

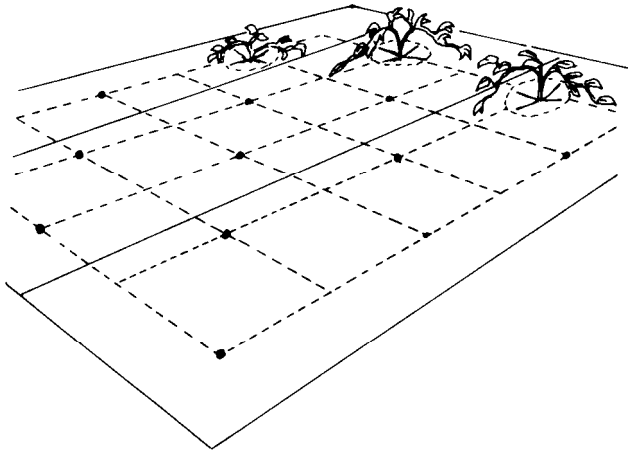
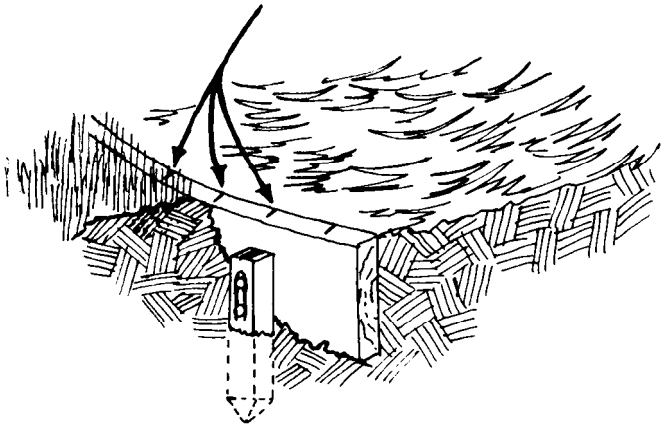


Figure 5. Establish a grid, the dimensions should be based on plant material needs using string to locate where each plant will be installed.

Many of the spreading groundcovers will root at the nodes on the stems as they trail along the ground. This will allow for more rapid cover over bare soil. Some examples are the prostrate Junipers, *Vinca minor,* wild strawberry, and several stonecrops. It is often the custom to use a bark mulch around the groundcover plants. This makes the edging or border more attractive than bare soil and makes pulling weeds easier.

You can use a metal or wood edging around borders and tree planting spaces. This will help to make a clear definition between the groundcover area and the lawn. Be certain that the edging material is no taller than one inch above the soil line. This will allow easy mowing without ruining the edging. The edging material should also extend into the ground 3 to 5 inches. This will prevent the cool-season grasses from invading the border areas. **(Figure 6)** These edgings are not effective against the spreading of zoysia and bermuda grass.

Figure 6. Wood edging around borders. Cut grooves halfway into boards to allow for easy bending.



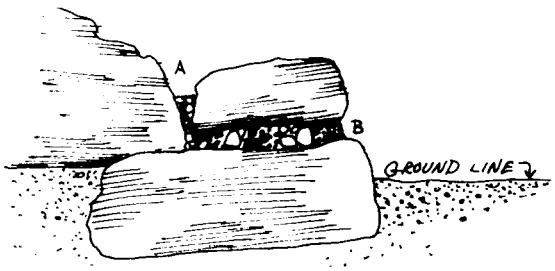
Rock Gardens in the Landscape

Use of rock may take on various forms in our landscapes. One of the most common forms of rock is the rock wall or terrace. This is generally referred to as a retaining wall, and makes an excellent location for that “special” appearance of a more natural setting.

The more formal arrangement of rocks in the traditional Japanese garden is also an excellent setting for rock gardens. In landscapes where the ground is monotonous, a rock garden may be created to give your landscape a new dimension.

Designing a Rock Garden

There are few features in the ordinary garden which are so ill understood and once built often neglected as the rock garden. The horrible mass of shiny, glazed lumps of brick work in the cracks of which half-starved plants struggle for existence is nothing but disfigurement. Add a donkey cart and a few plastic deer and the whole arrangement becomes absurd. The chief uses of the rocks and stones in a rock garden are the provision of coolness for the roots and the storing of moisture in crevices for the use of the plants. The idea that rock plants grow best in practically nothing but rock is a mistaken one.



A generous allowance of good soil between, amongst, and beneath the stones is essential for the healthy growth of the plants. As the function of the rocks is to provide shelter for roots, it is clearly useless to plant slabs of rock or stone perpendicularly in the soil. No protection is afforded in this way. The roots cannot get beneath them and they do not preserve any moisture. **(Figure 7)**

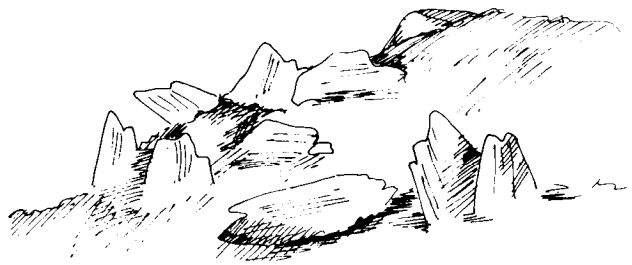


Figure 7. To create a rock garden, do not plant slabs of rock perpendicular in the soil.

Large masses of stone two or more feet in length should be used where possible and should be sunk well and firmly in the earth in a slightly slanting direction. They should be tilted backwards, not forward, so that the rain may trickle down to the roots of the plants.

Figure 8. Study a natural stone outcrop.

The visible portions of the rocks should be as pleasing as can be and should all slant in the same directions to represent a natural outcrop of stone. **(Figure 8)** But, it should never be forgotten that they are not there for the sake of picture's effect, but to protect the roots of the plants growing among them.

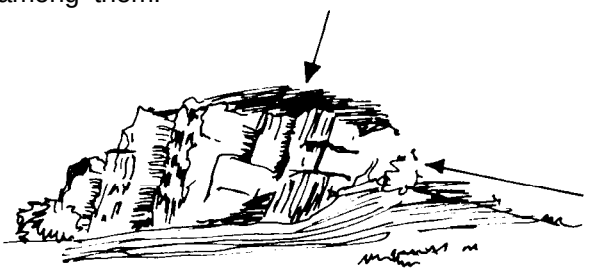
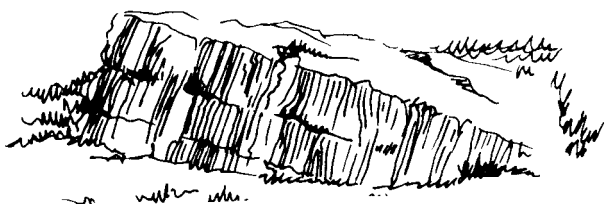


Figure 9. Strongly marked lines of stratifications.

The rocks should be of indigenous stone to make it all look as if it belongs. Before starting to build, you should if at all possible, study some natural rock outcroppings and see what happens in nature. Examining an exposed face of rock, except for igenous rock like granite, you will see a suggestion of strongly marked lines of stratification. **(Figure 9)** These are continuous and may be at any angle between the horizontal and vertical. These parallel lines show how the stone was deposited and grew in level layers, sometimes later to be thrown up by internal forces as seen along roadcuts in Appalachia and Rocky Mountains. It is important that when we rebuild rock on a small scale that these stratum lines are parallel and that the pieces of stone lie along these lines.

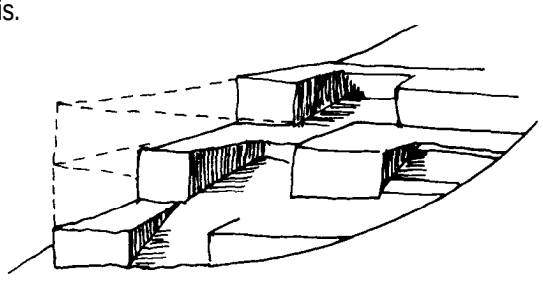
Figure 10. A limestone outcrop.



The rock garden should not be used to store your rock collections. This type of garden would consist of a heterogeneous assemblage of rocks that have been collected from many different locations of the country.

The most important rule to consider when building a rock garden is that it should not appear to be man-made. Select your rocks carefully from similar rock formations. In Kansas, you will generally find the sedimentary rocks of sandstone, shale, or limestone. If you can find an outcropping of these rocks, use these in sizes ranging from large to small rocks. Attempt to recreate this outcropping in your yard. You will most likely have to scale it down to a size that fits your landscape. **(Figure 10)** The important thing is to use only one type of rock.

Figure 11. Erosion causes pockets which fill with soil and debris.



When arranging these rocks in your garden, remember that nature covers the rocks with soil and fills in the low areas. **(Figure 11)** Expose only the weather-worn surfaces—never the freshly cut sides. If you can use rocks that already are covered with some lichens or moss, it is much better. When fitting the rocks into the setting, use large rocks as the backbone and then place the smaller rocks into the design. Be sure that these rocks are not fitted together too tightly. A good rock garden will have many soil pockets left between the rocks for plants. Give your rock garden a background of shrubs and if possible some small trees. **(Figure 12)** The sound of water adds interest to any garden and the construction of a small pool with water trickling over a rock as part of a rock garden may be well worth your time and investment. For a schematic outline of a small rock garden pool, see **Figure 13.**

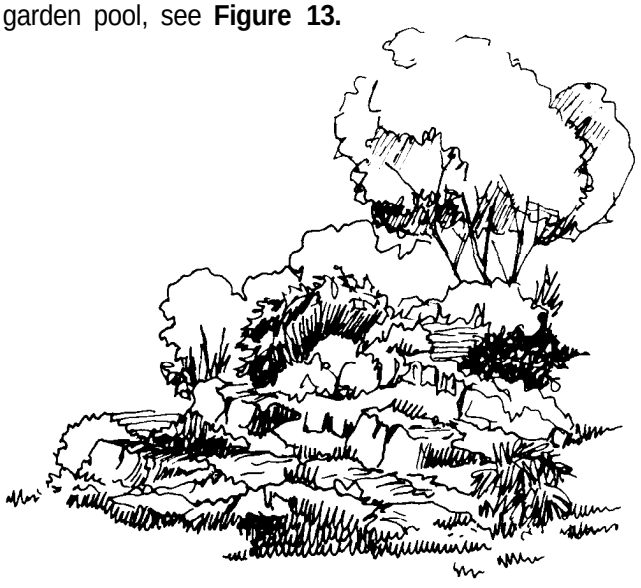


Figure 12. A naturalistic approach to creating a rock garden.

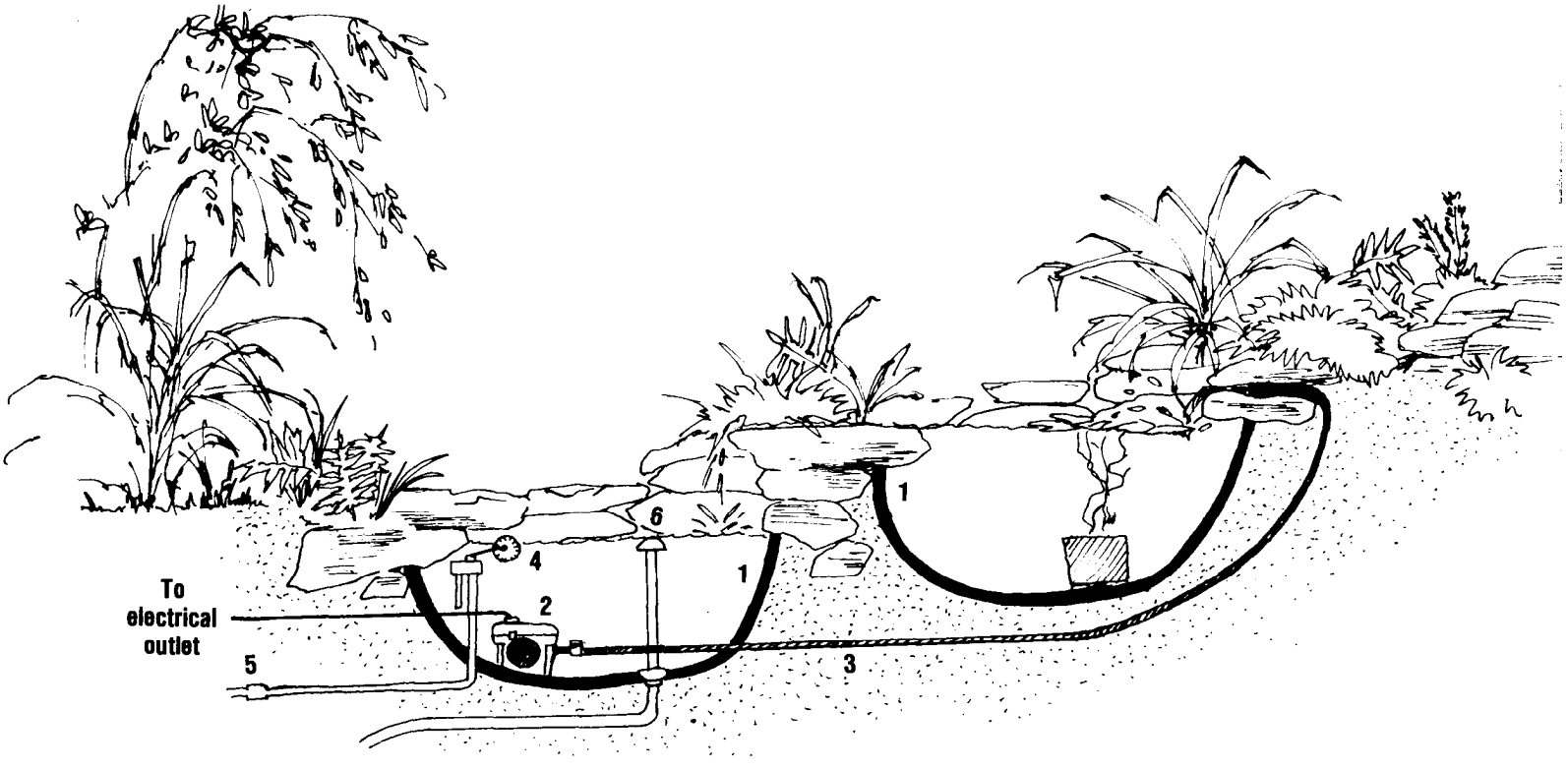
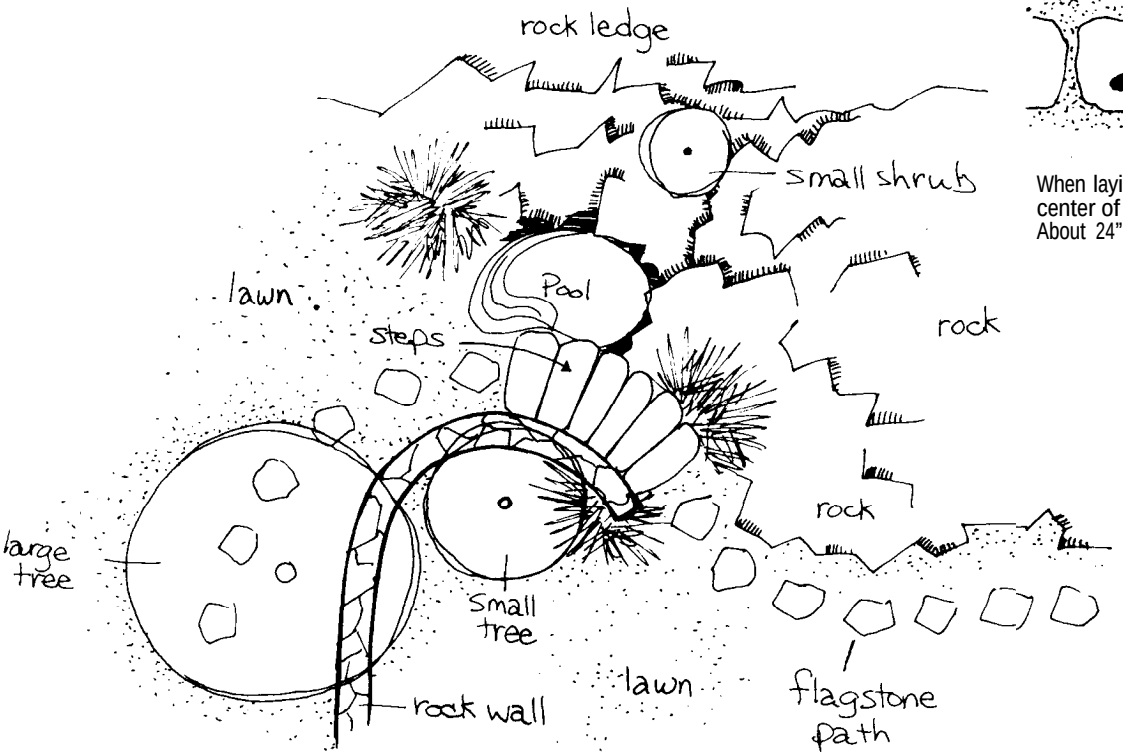
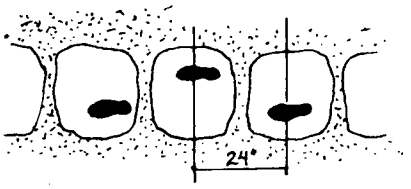


Figure 13. 1. Line pool with dark painted concrete, slope sides to help prevent cracking in winter.
2. Low horse power, submersible pump with grounded connection. Water is pumped from lower pool up to higher pool.
3. Plastic hose buried underground.
4. A toilet cistern type float valve to control water level.
5. A check valve to prevent water from flowing back in house system.
6. Drain allows for overflow. Water can be taken to a large hole filled with rocks where it can seep through back to ground water supply. When unscrewed, water drain at pool level.

Figure 14. A rock garden layout as part of the landscape.





When laying out a flagstone path make the center of the stones a normal step apart. About 24"

Planting the Rock Garden

Adequate drainage is probably the most important factor to consider in the planting of any rock garden. Rock garden plants and alpine species require well-drained soils. Generally, a well-designed rock garden or wall will provide adequate drainage for any plants you wish to use.

The great mass of rock plants like a rich soil, even where they need little of it. A soil full of coarse sand or grit, leaf-mould and other decayed plant material mixed in some cases with old, well-decomposed manure is excellent for rock gardening. Where rock plants are studied in their natural conditions, it will be found that in most cases the soil around the roots is completely covered by the stalks and leaves, each plant touching its neighbors and that practically no soil is left exposed. This arrangement is of the greatest use to the plants as it prevents the exposure of the soil to the action of the sun and wind; its natural moisture is preserved. When starting with small plants, this is rather difficult to attain at first. The small plants are unable to cover the surface of the ground and planting them closer together would merely mean overcrowding them resulting in dying out of plants. In such case, the best thing is to cover the intermediate surface of soil with pine bark or chips of stone, small enough to be easily pushed aside by a shoot but sufficient to help prevent overdrying of earth.

In selecting the site for a rock garden, remember that most of these plants require sun at least half of the day. However, some protection should be provided from the hot, dry southwest winds. Some shade may be provided by trees, but do not plant the trees in the rock garden itself. Tree root competition can be more of a problem than the sun.

The selection of plants for your rock garden will depend on your purpose. Do not select plants for a rock garden that make fast spreading groundcovers. The Stringy Stonecrop *(Sedum sarmentosum),* Vinca, or vines will pose a threat to other plants in the garden. Also, do not use plants that will be too tall for the rocks in the garden. The best design gives the appearance of the plants being dwarfed by the rocks. You will want to conceal some of the plants under rocks and deep into crevices. This will give the appearance of plants in their natural habitat.

On most residential properties, the choice of site is definitely limited. In our hot climate, the ideal site would be a northeast, east, or northwest slope separated from the house by a stretch of lawn, yet visible from the patio and one or more windows. Where a natural setting is unavailable a more formal type of rock garden using stone terraces, dry rock walls and flagstone paths can be constructed. Such a design can be used closer to the home. Often steps can be made part of the design which adds interest to the landscape. **(Figure 14)**

Planting the Rock Wall

Rock walls are the simplest form of rock garden. **(Figure 15)** The results of planting a dry laid rock wall will often transform a simple retaining wall into a naturalistic masterpiece. **(Figure 16)** Interesting designs may be created by placing Stonecrops, Thyme, etc., in the cracks of the wall. Across the top of the wall, you may wish to use some prostrate Junipers. These will creep down over the side of the wall to give a "draped" appearance.

If the height of a slope or bank is over four feet, it is necessary to use two or more dry retaining walls. The areas between the walls are excellent locations for simple rock gardens. Here you may use groundcovers, design a rock garden, or use Mugho Pine and Junipers with some flowering plants. Another suggestion might be to use this area for your strawberries. Unless these areas are large enough to use for entertaining, it is best not to plant them to grass.

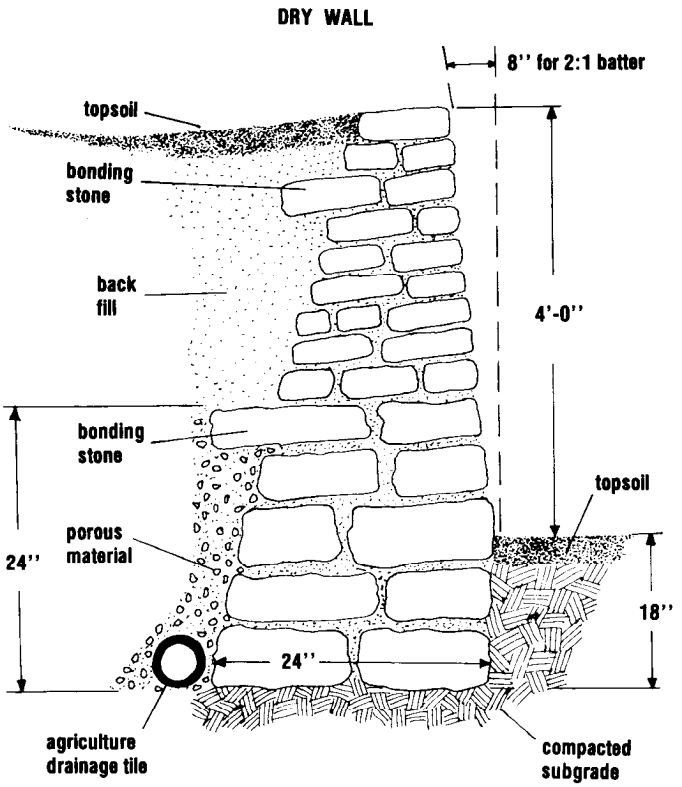
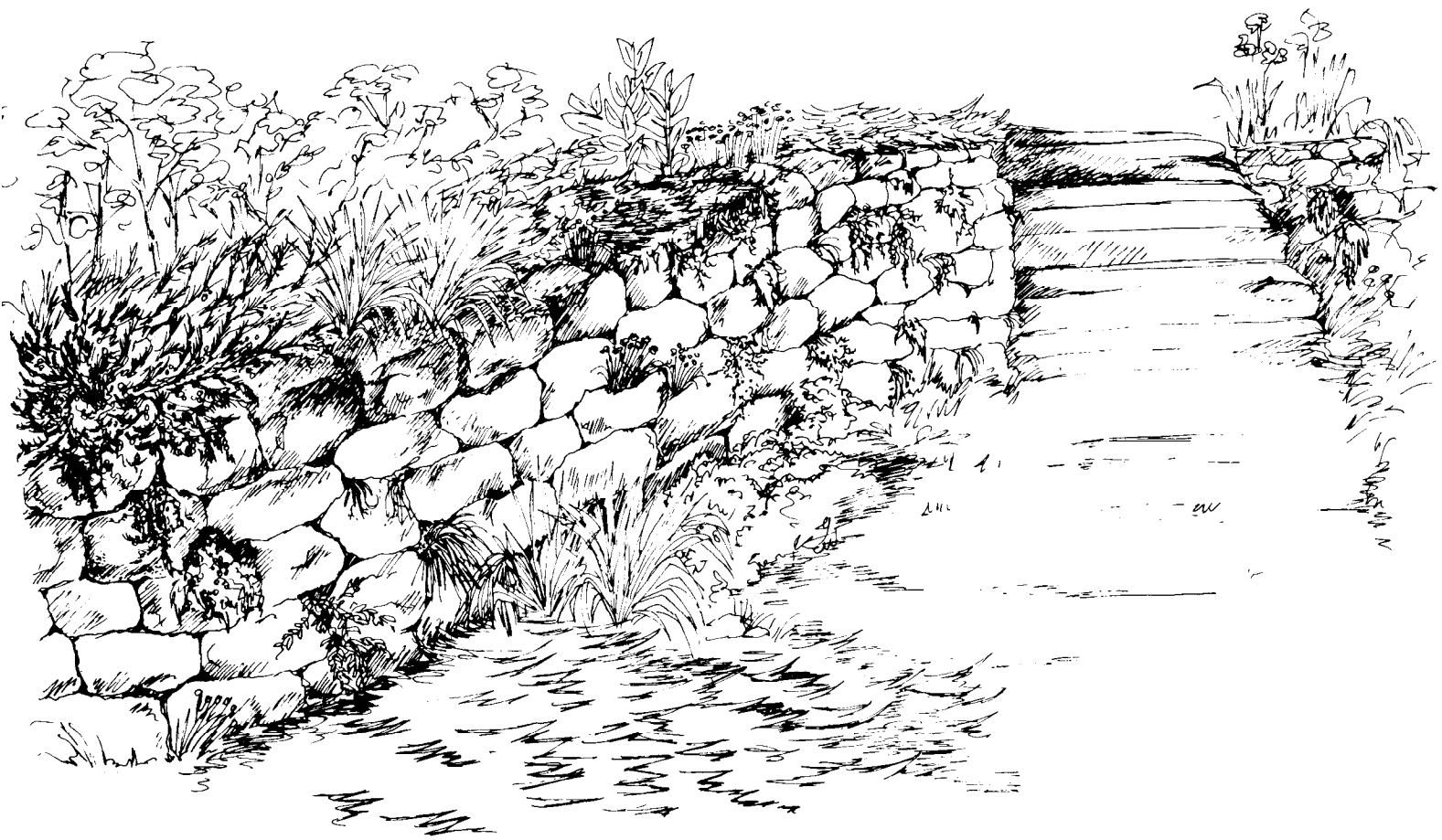


Figure 15. A dry laid rock wall with base approximately half as wide as height, stones slant slightly backward and adequate drainage is provided, at ground level and at base.

Figure 16. An attractive rock wall providing growing places for many plants.



Garden Steps

Steps in the rock garden or as part of a retaining wall can be a feature and present an opportunity for some craftmanship. **(Figure 17)** Steps should not be narrow as it is irritating to use steps in single file. An option are steps on a trail leading one through a rock garden. But, narrow steps on a main route look puny.

Garden steps should be walked easily for easy ascent make the tread about 14 to 16 inches for a 5 inch rise. **(Figure 16)** A simple formula to use is 2 X R + T = 26 or 27. Where R is the riser and T the tread.

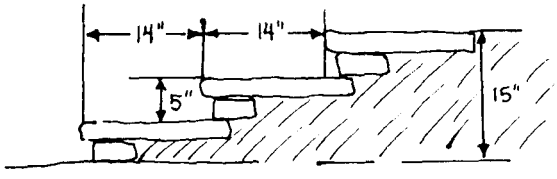


Figure 18. Dimensions for easy ascent and descent in garden steps construction.

You also should appreciate how much room a flight of steps can take. It generally looks more attractive when the steps bite into the body of the slope or terrace. **(Figure 19)** But, this is not always possible. With proper use of plant material protruding steps can be made to blend in. **(Figure 20)**

Where the elevations change is rather large a turn in the steps takes less space and a small landing adds comfort. **(Figure 21)**

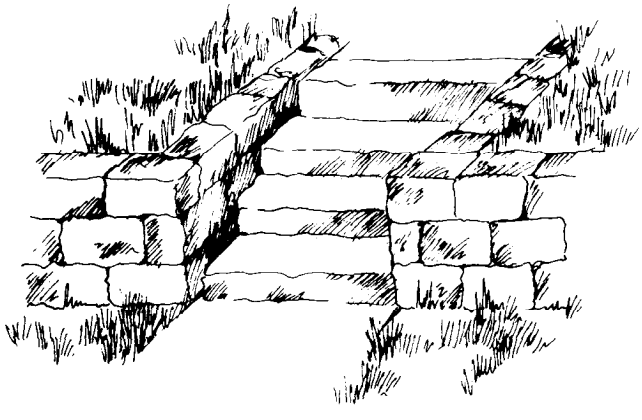


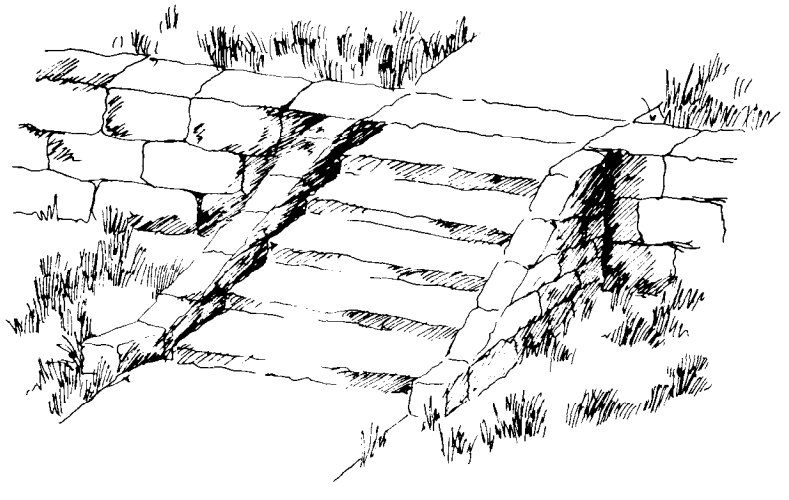
Figure 19. Steps can "bite" into a slope.

When selecting plant material for a rock garden, retaining wall or to soften outline of steps be sure to use a variety of form, color, texture, and growth habit-from prostrate Junipers and spreading Cotoneaster, to Silver Mound which nestles snug against the stone to creepers and joint rooters like thyme.

Figure 17. Steps made with large rocks. Note the gentle curve in the path.

Rock gardens are high maintenance plantings and you should not build one unless you enjoy being close to the soil on your knees!

Figure 20. Protruding steps which outline should be softened with plant material.



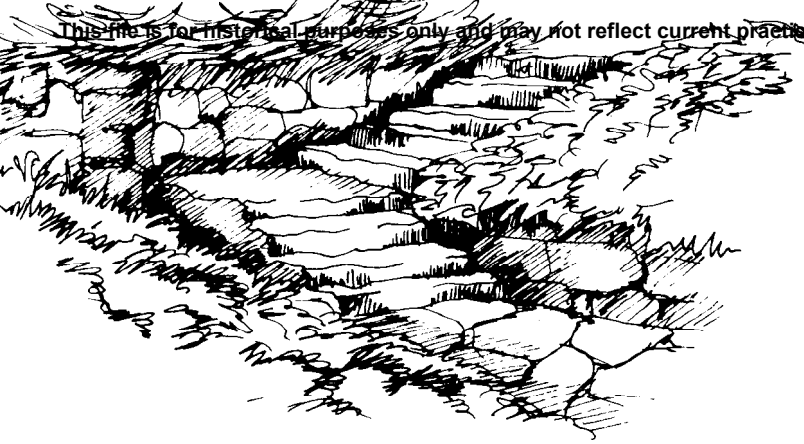
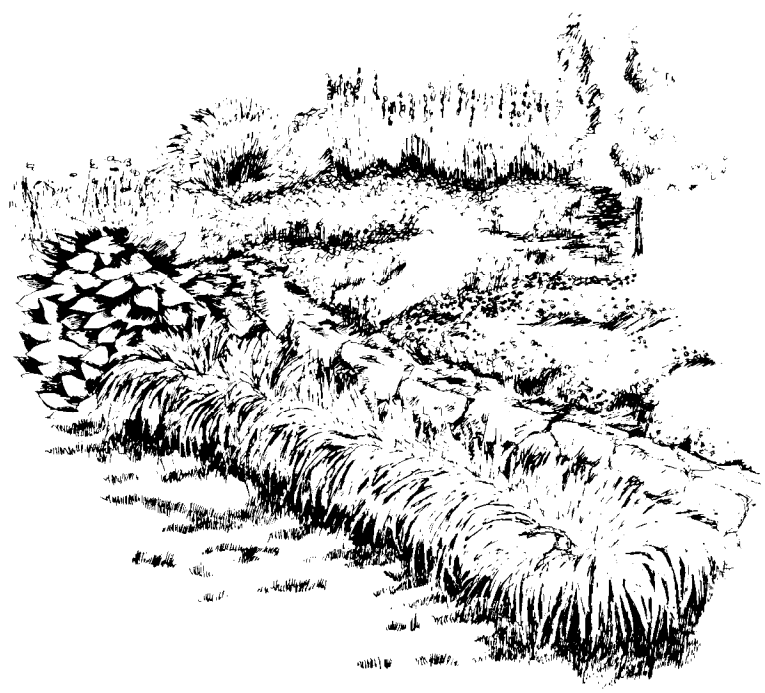


Figure 21. Garden steps with a small landing.

Ornamental Grasses and Yucca in the Landscape

The ornamental grasses provide us with an array of sizes and colors for our landscapes. The small clump-form of some of the ornamental grasses are excellent for low garden borders, **(Figure 22)** entryways, and are also well suited for rock gardens. **(Figure 23)** The other forms of hardy ornamental grasses are generally too tall for border use, unless they are to provide background. A row of plants, such as Giant Reed or Ravennagrass, will provide a screen for your yard, if this is the type of plant you desire. A single clump of the taller grasses is used most effectively for accent purposes. **(Figure 24)** This might be either at the front entrance of your home, or an accent in the border in the backyard. A note of warning—use the tall striking grasses judiciously and ask yourself the question, "Do they really compliment my overall plant composition?"—because many have been planted and are growing out of place; they were part of a plant fad.

Figure 23. Medium sized ornamental grasses used to soften outline of a rock wall.



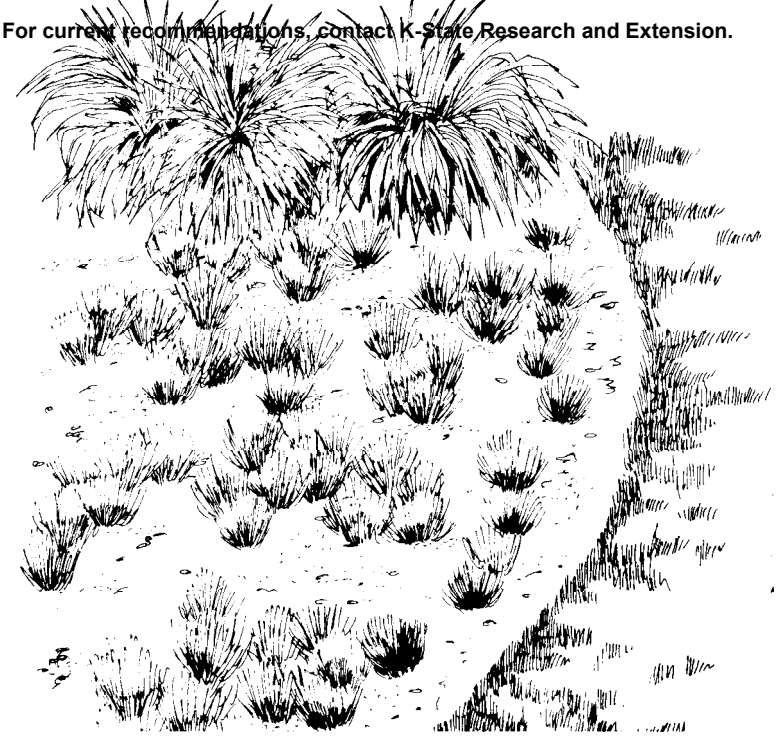


Figure 22. To be effective use a mass of the smaller ornamental grasses.

Figure 24. Large, ornamental grasses should be used in smaller clumps-don't overuse them.

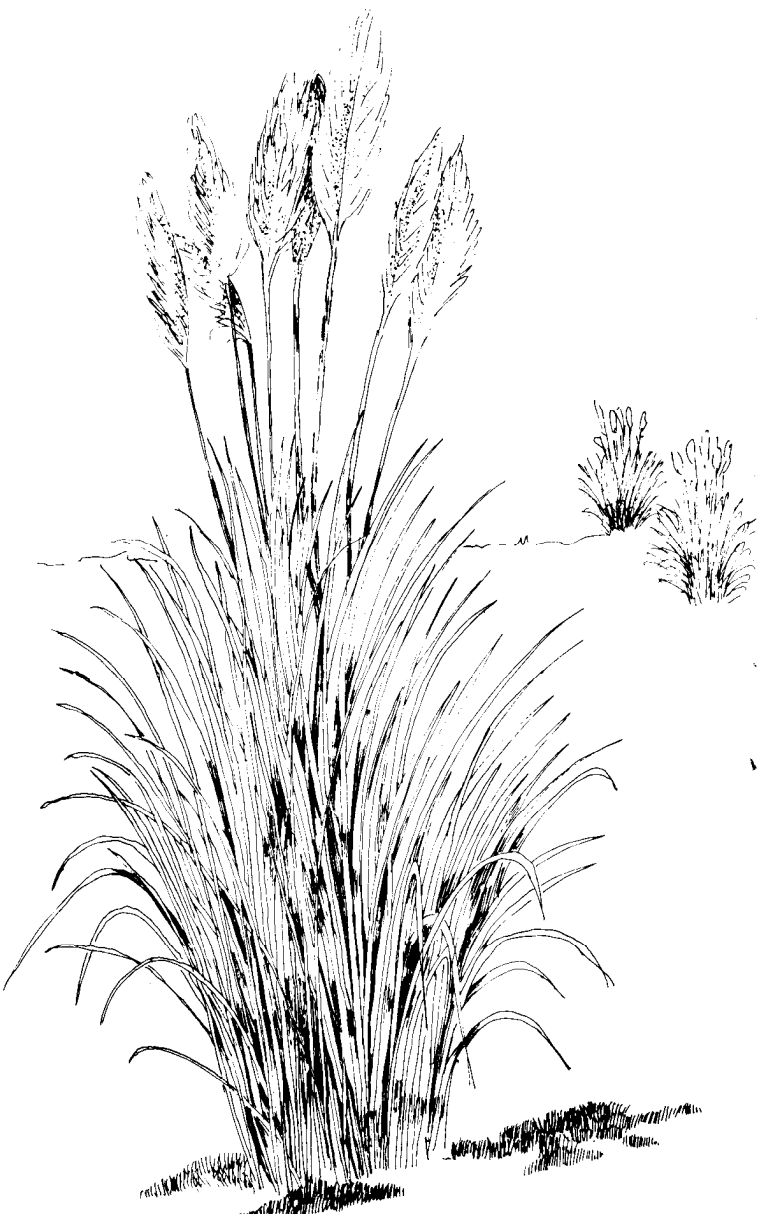


Figure 25. Yucca's naturalized in the border.

The Yuccas are often used as accent plants and are very attractive for naturalizing where space permits. For entree plantings, drawing attention to the entree, group three or more Yuccas together in the border to give the appearance of a more natural setting. **(Figure 25)** A word of caution—the tip ends of the Yucca are sharp pointed and might be considered a hazard near doorsteps. This is particularly important where small children are likely to play.

Vines for the Landscape

Two types of vines have been listed in the tables. These include the vines that may be used for excellent groundcovers, and those that should be used only as climbing vines. The vines that provide good groundcovers are:

Euonymus spp.	Creeping Euonymus
Hedra helix	English Ivy and varieties
Lonicera spp.	Creeping Honeysuckles
Polygonurn spp.	Silver-fleece vines

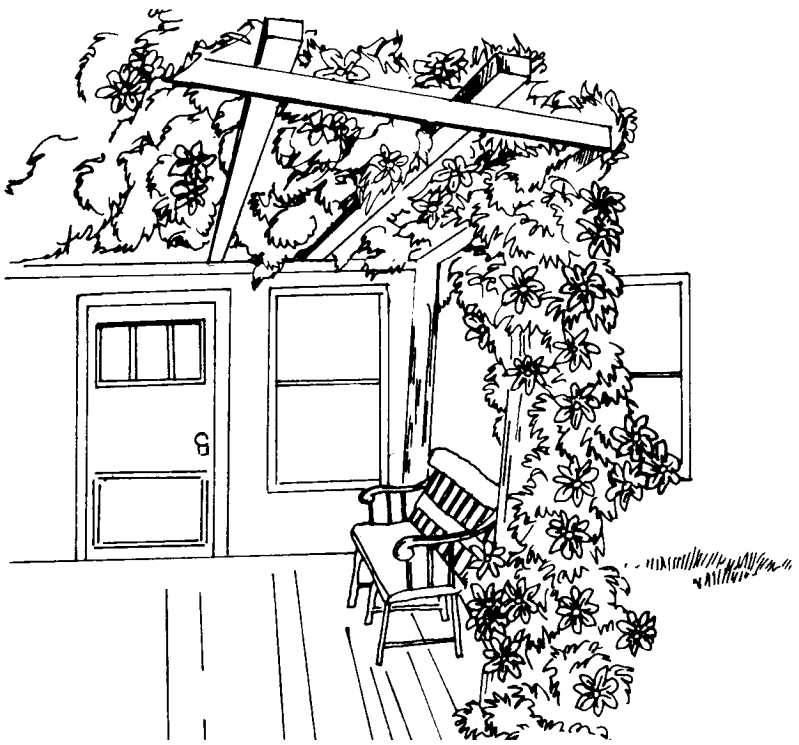
Those vines not listed above are not satisfactory for groundcovers either because they will not cover the ground satisfactorily or because they will outgrow their bounds too rapidly.

The creeping Euonymus have a tendency to climb walls of buildings and tree trunks when placed too close. This is more likely to happen in shady locations such as on north and east exposures. The climbing vines should also not be used next to buildings or trees. The vines will quickly establish themselves along the wall and cover the windows. Maintaining the exterior surface of a building is very difficult once vines are allowed to become established there.

Deciduous vines can be selected for climbing on arbors and shading patios or sun exposed walls of the house. They can provide shade more rapidly than shade trees and enhance the landscape near your home. **(Figure 26)**

When planting vines near the home, dig a large hole and fill with good soil. Too often soil near the base of the house is a mixture of mortar, bricks, pieces of lumber and building debris covered over with two inches of hard clay! Plant vine about 8 to 10 inches from wall.

Figure 26. Vines help with temperature control and create outdoor places.



GROUNDCOVERS TO FIT YOUR LANDSCAPE NEEDS

GROUNDCOVERS FOR SHADE

Bugle
Coral Bells
Crown Vetch
Euonymus
Forget-Me-Not
Forsythia, Arnold Dwarf
Honeysuckle, Hall's
Ivy, English
Lily-of-the-valley
Mahonia, Creeping
Pachistima
Periwinkle
Plantainlilies
Spurge
Stonecrops (some)
Strawberry, Wild
Thyme
Wintercreeper

GROUNDCOVERS FOR BANKS AND SLOPES

Bugle
Chokeberry
Cotoneaster, Cranberry
Cotoneaster, Rock
Crown Vetch
Euonymus
Forsythia, Arnold Dwarf
Ivy, English
Junipers
Lily Turf
Matrimony Vine
Moss Pink
Phlox, Creeping
Rose Acacia
Rose, Memorial
St. John's Wort
Sumac, Fragrant
Sweet William
Wintercreeper

GROUNDCOVERS WITH EVERGREEN FOLIAGE

Bugle
Candytuft
Euonymus
Junipers
Lily Turf
Mahonia, Creeping
Pachistima
Pine, Mugho
Spurge
Stonecrops
Thyme

BARRIER GROUNDCOVERS

Forsythia, Arnold Dwarf
Juniper
Mahonia, Creeping
Matrimony Vine
Quince, Alpine
Rose Acacia
Rose, Memorial
Sumac, Fragrant

GROUNDCOVERS THAT CAN BE MOWED OCCASIONALLY

Mother-of-Thyme
St. John's Wort
Speedwell, Creeping

GROUNDCOVERS AND ROCK GARDEN PLANTS:

Common Name	*Botanical Name*	*Height*	*Spread*	*Situation*	*Adaptability* *
Alyssum, Goldentuft	*Alyssum saxatile*	1'	1'	Sun	H, HB
Baby's Breath	*Gypsophila paniculata*	2'	1½-2'	Sun, ½ shade	W, HB
Bleeding Heart	*Dicentra spectabilis*	2'	1½-2'	Sun	W, HB
Bugle, Curly	*Ajuga metallica 'Crispa'*	4-12"	Spreading	Sun or shade	H, HB
Bugle, Carpet	*Ajuga reptans*	4-12"	Spreading	Sun or shade	H, HB
Candytuft, Evergreen	*Iberis sempervirens*	12"	12-15"	Sun, ½ shade	H, SE
Chokeberry, Black	*Aronia melanocarpa*	1½-3'	3'	Sun, ½ shade	H, BF
Coral Bells	*Heuchera sanguinea*	2'	1½'	Sun or shade	H, HB
Cotoneaster, Creeping	*Cotoneaster adpressa*	1-1½'	9-12'	Sun	X, BF
Cotoneaster, Cranberry	*Cotoneaster apiculata*	1-1½,'	5-8'	Sun	X, BF
Cotoneaster, Rock or Ground	*Cotoneaster horizontalis*	1½-2'	5-8'	Sun	X, BF
Creeping Charley	*Lysimachia nummularia*	1-2"	Spreading	Sun, ½ shade	X, I
Crown Vetch	*Coronilla varia*	1-2'	To 6'	Sun, shade	H, HB, NW
Daylily, Tawny	*Hemerocallis fulva* 'Kwanso'	2'	Spreading	Sun, ½ shade	H, HB, Y
Forget-me-not	*Myosotis scorpioides (palustris)*	8"	1'	Shade, ½ shade	X, SE, W
Forsythia, Arnold Dwarf	*Forsythia* X 'Arnold Dwarf'	3'	6'	Sun, shade	H, I
Hen and Chickens (Honseleck)	*Sempervivum tectorum*	3-6"	6"	Sun, ½ shade	H, HB, NW
Iris, Crested	*Iris cristata*	6"	Spreading	Sun, ½ shade	X, HB
Juniper, Blue Sargent	*Juniperus chinensis*	18"	6-7'	Sun, ½ shade	H, NW, I, BF
Juniper, Green Sargent	*Juniperus chinensis*	10"	6-7'	Sun, ½ shade	H, NW, I, BF
Juniper, Andorra	*Juniperus horizontalis*	18"	6-8'	Sun, ½ shade	H, NW, I, BF
Juniper, Compact Andorra	*Juniperus horizontalis*	8-12"	4-5'	Sun, ½ shade	H, NW, I, BF
Juniper, Bar Harbor	*Juniperus horizontalis*	10"	6-8'	Sun, ½ shade	H, NW, I, BF
Juniper, Blue Rug	*Juniperus horizontalis*	6"	6-8'	Sun, ½ shade	H, NW, I, BF
Juniper, Hughes	*Juniperus horizontalis*	8-10"	6-8'	Sun, ½ shade	H, NW, I. BF

GROUNDCOVERS AND ROCK GARDEN PLANTS: —(Continued)

Common Name	*Botanical Name*	*Height*	*Spread*	*Situation*	*Adaptability* *
Juniper, Prostrate	*Juniperus horizontalis*	6-8”	4-6’	Sun, ½ shade	H, NW, I, BF
Juniper, Waukegan	*Juniperus horizontalis*	10”	8-10’	Sun, ½ shade	H, NW, I, BF
Juniper, Webber’s	*Juniperus horizontalis*	8-10”	6-8’	Sun, ½ shade	H, NW, I, BF
Juniper, Japgarden	*Juniperus procumbens*	1-2’	5-6’	Sun, ½ shade	H, NW, I
Juniper, Dwarf Japgarden	*Juniperus procumbens* ‘nana’	1’	4-5’	Sun, ½ shade	H, NW, I
Juniper, Tamarix Savin	*Juniperus sabina ‘Tamariscifolia’*	2’	5-6’	Sun, ½ shade	H, NW, I, BF
Leadwort	*Plumbago larpentae*	6”	12-18”	Sun,	H, HB
Lily-of-the-valley	*Convallaria majalis*	8”	12-15”	Sun, ½ shade	X, HB
Lily Turf, Creeping	*Liriope spicata*	8-12”	3-4’	Sun, shade	SE
Mahonia, Creeping (Oregon Grape)	*Mahonia repens*	10”	2’	Sun, shade	H, NW
Matrimony Vine	*Lycium halimifolium*	—	15-20’	Sun	NW, BF
Moss Pink	*Phlox subulata*	6”	1’	Sun	H, HB
Mother-of-thyme	*Thymus serpyllum*	1”	10-12”	Shade, ½ shade	H, HB
Pachistima, Ratstripper	*Pachistima canbyi*	6-12”	2-3’	Shade, ½ shade	HB, X, W
Periwinkle (Myrtle}	*Vinca minor*	3-6”	Spreading	Sun, shade	H, NW
Periwinkle, Bowles	*Vinca minor* ‘Bowles’	6-8”	8-12”	Sun, shade	H, NW
Phlox, Creeping	*Phlox stolonifera*	6-12”	1’	Sun	H, HB
Pine, Mugho	*Pinus mugho mughus*	4-10’	4-10’	Sun, ½ shade	H, NW
Plantainlily	*Hosta decorata*	1-2’	24-30”	Shade, ½ shade	H, HB
Plantainlily, Blue	*Hosta caerulea*	12-15”	18-24”	Shade, ½ shade	H, HB
Quince, Alpine Flowering	*Chaenomeles japonica alpina*	1’	3-4’	Sun	X, W, BF
Rockcress,’ Alpine	*Arabis alpina*	8-12”	1’	Sun, ½ shade	H, HB
Rose, Acacia	*Robinia hispida*	3-4’	3-4’	Sun, ½ shade	H, I
Rose, Memorial	*Rosa wichuriana* ‘Dorothy Perkins’	1’	15-20’	Sun	X, W
St. John’s Wort, Creeping	*Hypericum repens*	6”	Spreading	Sun	H, HB, NW
Silver King	*Artemesia albula*	1-1½’	1½’	Sun	W, HB
Silver Mound	*Artemesia schmiltiana* ‘nana’	8”	12”	Sun	W, HB
Speedwell, Creeping	*Veronica repens*	4”	12-15”	Sun	X, SE
Spurge, Mountain	*Pachysandra terminalis*	6-12”	2-4’	Shade, ½ shade	HB, X, W
Stonecrop, Goldmoss	*Sedum acre*	2-3”	Spreading	Sun, ½ shade	H, HB, NW
Stonecrop, White	*Sedum album*	8”	Spreading	Sun, ½ shade	H, HB, NW
Stonecrop, Lydium	*Sedum lydium* ‘Glaucum’	3-6”	Spreading	Sun, ½ shade	H, HB, NW
Stonecrop, Stringy	*Sedum sarmentosum*	6”	Spreading	Sun, ½ shade	H, HB, NW
Stonecrop, Seibold	*Sedum sieboldi*	12”	12-24”	Sun, ½ shade	H, HB, NW
Stonecrop, Brilliant	*Sedum spectabilis*	12”	Spreading	Sun or shade	H, HB, NW
Stonecrop, Indian Chief	*Sedum spectabilis ‘Telephium’*	10-15”	Spreading	Sun or shade	H, HB, NW
Stonecrop, Dragon’s Blood	*Sedum spurium*	6”	Spreading	Sun or shade	H, HB, NW
Strawberry, Wild	*Fragaria vesca* ‘Americana’	6-9”	Spreading	Sun or shade	X, HB, BF
Sumac, Fragrant	*Rhus aromatica*	3’	3’	Sun	H, I
Thyme, Common	*Thymus vulgaris*	6-8”	8-10”	Shade, ½ shade	H, HB
Viburnum, Dwarf Cranberrybush	*Viburnum opulus* ‘nanum’	1-2’	2-3’	Sun, ½ shade	H, NW

* *Adaptability Symbols:*
H—Hardy plant that is generally recommended for home grounds use where a plant of this size and type are desired.
HB—Herbaceous perennial plant. Unless evergreen, the foliage dies to the ground each fall.
NW—Cold hardy, even in high plains area of Kansas.
SE—Does best in south eastern and eastern sections of Kansas.
X—Hardiness is doubtful in hotter, dryer sections of Kansas.
I—Subject to iron chlorosis in high lime soils.
W—Protect with a mulch in winter.
BF—Fruits and seeds are valuable for bird feed.
Y—Flowers close up at night.

PERENNIAL VINES:

Common Name	*Botanical Name*	*Size*	*Situation*	*Adaptability* *
Bittersweet	*Celastris scandens*	Climbing to 30' +	Sun, part shade	Hardy
Bittersweet, Oriental	*Celastris orbiculatus*	Climbing to 30' +	Sun, part shade	Hardy
Clematis, Jackman	*Clematis jackmani*	Climbing to 18'	Sun, part shade	Hardy
Clematis, Henry	*Clematis lawsoniana* 'Henryi'	5-8'	Sun, protect	SC, P
Clematis, Sweet Autumn	*Clematis paniculata*	Climbing to 30' +	Sun, part shade	X
Euonymus, Babyleaf	*Euonymus fortunei* 'Minimus'	2" as groundcover	Sun or shade	Hardy
Euonymus, Longwood	*Euonymus fortunei* 'Longwood'	6-8" as groundcover	Sun or shade	Hardy
Euonymus, Wintercreeper	*Euonymus fortunei*	Climbing or trailing	Sun or shade	Hardy
Honeysuckle, Goldflame	*Lonicera heckrotti*	Spreading to 20-30'	Sun or shade	Hardy
Honeysuckle, Hall's Japanese	*Lonicera japonica* 'Halliana'	Spreading to 20' +	Sun or shade	Hardy
Honeysuckle, Purpleleaf	*Lonicera japonica* 'Purpurea'	Spreading to 20' +	Sun or shade	Hardy
Honeysuckle, Scarlet Trumpet	*Lonicera sempervirens*	Spreading to 20' +	Sun	Hardy
Ivy, Boston	*Parthenocissus tricuspidata*	Climbing to 60'	Sun or shade	Hardy
Ivy, Engelmann	*Parthenocissus quinquifolia*	Climbing to 30-50'	Sun or shade	X
Ivy, English	*Hedra helix*	Climbing to 20' +	Part shade	X
Silver-Fleece Vine	*Polygonum auberti*	Climbing to 25' +	Sun	Hardy
Silver-Fleece Vine, Pink	*Polygonum reynoutria*	Climbing to 25' +	Sun	Hardy
Trumpet Creeper	*Campsis radicans*	Climbing to 30' +	Sun	Hardy
Trumpet Creeper 'Madame Galen'	*Campsis* X *tagliabuana*	Climbing to 30' +	Sun	Hardy
Virginia Creeper (Woodbine)	*Parthenocissus quinquifolia*	Climbing to 30-50'	Sun or shade	Hardy
Wintercreeper, Bigleaf	*Euonymus fortunei* 'vegetus'	4' shrub or vine	Sun or shade	Hardy
Wintercreeper, Common	*Euonymus fortunei* 'radicans'	6-12" as groundcover	Sun or shade	Hardy
Wintercreeper. Kew	*Euonymus fortunei* 'Kewensis'	2" as groundcover	Sun or shade	Hardy
Wintercreeper, Purpleleaf	*Euonymus fortunei* 'coloratus'	6" as groundcover	Sun or shade	Hardy
Wisteria, Purple	*Wisteria sinensis* 'purpurea'	Spreading to 20' +	Sun	SC, P
Wisteria, White	*Wisteria sinensis* 'alba'	Spreading to 20' +	Sun	SC, P

* Adaptability Symbols:
Hardy—Hardy plant that is generally recommended for home grounds use where a plant of this size and type are desired.
SC—Does best in south central and eastern portions of Kansas.
X—Hardiness is doubtful in hotter, dryer sections of Kansas.
P—Protect from southwest winds during late summer.

YUCCA AND ORNAMENTAL GRASSES:

Common Name	*Botanical Name*	*Height*	*Spread*	*Situation*	*Use*	*Comments*
Fescue, Blue	*Festuca ovina* 'glauca'	12"	12"	Sun, ½ shade	Japanese gardens, borders, gravelled areas.	Grows well in protected home landscapes, wherever fescue may be used for lawn. A decorative blue colored grass, best used in individual clumps.
Fountain Grass	*Pennisetum ruppelii*	4'	4-5'	Sun	Accent, low background.	Gives the appearance of a fountain, with large one-foot spikes colored purple, copper-red, and rose.

YUCCA AND ORNAMENTAL GRASSES: —(Continued)

Common Name	*Botanical Name*	*Height*	*Spread*	*Situation*	*Use*	*Comments*
Job's Tears	*Coix lacryma-jobi*	2-4'	3-5'	Sun	Annual, so must be sown each year. Often self-seeds. Accent, screen, or rock garden.	Best known for its hard, shiny, large gray seeds. When dried, these are used as beads. Sprays of seeds make good dried winter bouquets.
Ravenna Grass (Pampas Grass in Kansas)	*Erianthus ravennae*	8-10'	4-6'	Sun	Accent, background, screen.	A tall ornamental grass. Tall stems have 3' spikes topped with silvery plumes. Foliage grows in a clump to 4' tall.
Reed, Giant	*Arundo donax*	8-12'	8-12'	Sun	Use for sub-tropical effect, accent, screen or background	A perennial ornamental grass with stout stems and gray-green leaves.
Ribbon Grass	*Phalaris arundinacea* 'picta'	4'	Spreading	Sun or shade	Good groundcover, or for accenting larger areas	Use purchased divisions. Grows best in sun, but tolerates shade. Conspicuous because of its variegated leaves.
Yucca, Adams Needle . . .	*Yucca filimentosa*	3-4'	3-4'	Sun or shade	Accent, rock gardens.	Flowers are creamy-white on 1-3' spikes. Foliage is evergreen, tough, and pointed, with a slight blue cast. Rose colored flower also available.
Yucca, Great Plains . . .	*Yucca glauca*	3-5'	4-5'	Sun or shade	Accent, rock gardens.	Narrow, gray-green foliage has a thin white margin. Flowers are greenish-white on a 3' spike. Rose colored flowering variety also available.
Yucca, Red	*Hesperaloe parviflora* 'Engelmanni'	4'	6-8'	Sun or shade	Accent or gravelled areas.	Thick gray-green narrow yucca-like foliage. Deep pink bell-shaped blossoms.
Yucca, Thompson's	*Yucca thompsonia*	6'	6'	Sun or shade	Accent or rocked area.	Bluish narrow foliage borne on a shaggy trunk, either single or several stems. Flowers are white and appear in June.
Zebra Grass	*Miscanthus sinensis* 'Zebrina'	4-5'	4-5'	Sun	(See Silver Grass)	Similar to silver grass, but leaves have yellow-white bands crosswise instead of following the margins.
Chinese Silver Grass	*Miscanthus sinensis* 'variagatus'	3-4'	3-4'	Sun	Rock gardens, accent, background for low borders.	The narrow leaves are striped and form a fountain-like clump. Plumes make good dried winter bouquets. Requires little or no watering.

This publication is one of a series of bulletins intended to assist you with your landscape planning. Use this information when selecting plant material for particular locations in your yard. Consider each plant for its intended use, site location, and exposure. Use the plant descriptions listed in the tables while visiting nurseries. This will enable you to realize the size and performance you may expect from the plants that are for sale.

For further information on landscape plant materials, see the Extension publications "Ornamental Shrubs for Kansas," "Trees for Kansas Landscapes" and "Evergreens for Kansas Landscapes."

When selecting vines, it is important to know how a vine clings in order to achieve the best support and care of maintenance. Some vines have rootlike holdfasts. **(Figure 27)** e.g. Euonymus, Winter Creeper, others attach themselves with the help of modified tendrils with circular discs. **(Figure 28)** e.g. Virginia Creeper, others wind tendrils around the support. **(Figure 29)** e.g. grapes and those as the Wisteria wind around the support itself. **(Figure 30)**

Figure 27

Figure 28

Figure 30

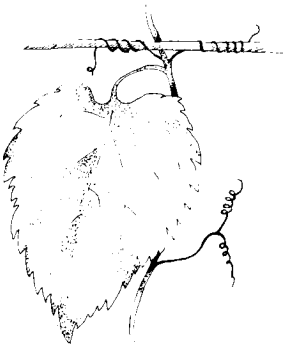


Figure 29

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