

HARDY, LOW MAINTENANCE SHRUBS SUIT GREAT PLAINS LANDSCAPES

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The climatic conditions of the Great Plains present a real challenge for growing woody ornamentals. The cold, long winter months along with a steady wind current with sudden changes in temperature makes winter hardiness an essential element for plants grown in this area. The usually low monthly rainfall during the growing season along with a steady wind creates a challenge to the gardener during the growing season. Most of the soil in the area is alkaline which limits the plant choice furthermore. However, homeowners continue to show an increased interest in home and public beautification with a desire for more low maintenance plants. Contemporary lifestyles and homes limit the homeowners' time for landscape maintenance; therefore, careful consideration must be made in selecting woody ornamentals to fit these needs. However, ornamental features on woody plants such as flower color, fruit color and size, foliage appearance, fall color and dwarf growth habit don't need to be sacrificed.

Evaluation research which yields a greater variety of plant material adaptable to rigorous climates has been conducted for many years at various state universities and arboreta in the Great Plains. At South Dakota State University research conducted by the Horticulture-Forestry Department over a period of time at several sites within South Dakota with varying climates has resulted in certain woody ornamentals which are more maintenance free and adaptable to this climate. The following discussion will deal with some of the more promising low maintenance plants that will grow in this area which were evaluated in our research.

Several shrubs from our research trials have emerged as outstanding small shrubs (generally maturing 4 feet or less) because of their growth habit and other good ornamental characteristics. Plants falling into this category include: *Abeliophyllum distichum* (Korean Abelialeaf), *Amorpha brachycarpa* (Short-Podded Leadplant), *Berberis koreana* (Korean Barberry), *Caragana pygmaea* (Pygmy Peashrub), *Diervilla lonicera* (Dwarf Bush Honeysuckle) and 3 cultivars of *Potentilla fruticosa*.

Abeliophyllum distichum (Korean Abelialeaf) is an early bloomer with its pleasantly scented flowers appearing in early to mid-April. The conspicuous, small white blossoms are borne in dense clusters along the previous year's wood before leaves appear. Korean Abelialeaf adapts to almost any well drained soil in full sun or light shade. It is a good companion shrub for the forsythias. It has been in our trials since 1967, and has bloomed each spring. The leaves are darker green throughout the summer, turning a purplish fall color. The growth habit is a little more open than desired, but early white flowers announcing spring's arrival make it an adaptable plant for a rigorous climate.

Amorpha brachycarpa (Short-Podded Leadplant) grows erect to a height of three feet. Its dull gray-green pinnately compound leaves make it conspicuous among plants in a shrub border. Small purple-blue flowers borne in spikes ranging up to 10 inches long appear in June-July. The plant is quite adaptable to

poor, dry, sandy soils and is easy to transplant, making it another adaptable low maintenance plant.

Berberis koreana (Korean Barberry) displays a deep red fall leaf color which makes it a winner. In addition, the fruit clusters — bright red, egg-shaped true berries — are effective in the fall and into winter. The Korean Barberry is classed as a small shrub growing 4 to 6 feet tall and slightly less in spread. Because of spines, usually simple, borne on its stems and its dense growth habit, it serves as an excellent barrier plant.

Yellow flowers appear in early to mid-May in drooping clusters which are quite showy. It is easy to transplant and tolerates most soils except permanently wet ones. It may be planted in full sun or light shade. Any pruning desired may be done at anytime. It has proven to be winter hardy and adaptable to more drought type conditions.

The rounded form of *Caragana pygmaea* (Pygmy Caragana) adds to its worth as a landscape plant. Although very fine textured, the Pygmy Caragana grows 3 to 4 feet high. Its bright yellow pea-like flowers in late spring are the most desirable ornamental feature other than the gray-green foliage color. Recommended uses include shrub borders and hedges. This plant is quite adaptable to drought conditions and withstands wind and extremely cold temperatures. However, winter appearance isn't the most desirable ornamentally.

Diervilla lonicera (Dwarf Bush Honeysuckle) is a hardy shrub with a medium texture. It bears yellow flowers in July into August at the terminal ends of the branches but they are not conspicuous. It will grow in dry soil types and makes a good bank cover. The new growth is more red-bronze and has a more dwarf compact growth habit.

Potentilla fruticosa (Bush Cinquefoil) with its silky leaves and bright buttercup-yellow flowers is a compact hardy shrub ideal for foundation or border plantings. It adapts to more rigorous climatic conditions and produces its flowers throughout the growing season from June until frost.

Three cultivars that perform well in the midwest and plains regions include: 'Coronation Triumph,' 'Gold Drop,' and 'Jackmannii.'

'Coronation Triumph,' one of the larger cultivars, grows to a height of 3 to 4 feet. It has a dense, mounded growth habit with soft green foliage. Its large quantity of yellow flowers makes it a favorite.

Deep yellow flowers and very small leaves are characteristics of the cultivar 'Gold Drop.'

'Jackmannii' also is a larger plant growing 3 to 4 feet in height. Its foliage color is medium green. The bright yellow flowers are borne in profusion.

These cultivars of Bush Cinquefoil transplant easily. They withstand cold temperatures and poorer soils. However, for best flower production they should be planted in full sun in fertile, well drained soil.

Rosa blanda (Meadow Rose) is distinguished since it is often unarmed and has red to purple-red bark. This bark coloration adds to the winter landscape. Flowers of the Meadow Rose are single and pink, typical of "wild" rose species, appearing in May and June. The



Common Sea Buckthorn bears bright orange berries along its stems.

numerous red hip fruit prevail throughout the winter and add winter texture. It does sucker but is quite adaptable in poor growing conditions.

Shrubs falling into the more medium height category (4-8 feet tall) from our trials, which are more maintenance free and will withstand rigorous climates include: *Caragana frutex* 'Globosa' (Globe Caragana),

Cornus sericea 'Isanti', *Lonicera tatarica* 'Valencia' (Valencia Honeysuckle), *Philadelphus X lemoinei* (Lemoine Mockorange), *Sorbaria sorbifolia* (Ural False Spiraea), *Viburnum opulus* 'Compactum' (Compact European Cranberrybush) and *Syringa meyeri* (Meyer Lilac).

Caragana frutex 'Globosa' (Globe Caragana) is a slow growing compact, non-suckering shrub. Its name designates the globe-shaped growth habit which is maintained to maturity. Very little, if any, pruning is necessary to maintain this shape. Flowers and fruit are not outstanding but its dark green foliage which holds late into the fall is a plus feature. Its growth rate and habit makes it an ideal hedge or foundation plant. Globe Caragana tolerates alkaline soil conditions and more drought type growing conditions.

The bright red winter bark color of *Cornus sericea* 'Isanti' (Isanti Dogwood) is an outstanding ornamental feature of this medium-sized, compact shrub. Small white flowers in flat clusters are generally produced in early summer followed by abundant white to blue-white berries.

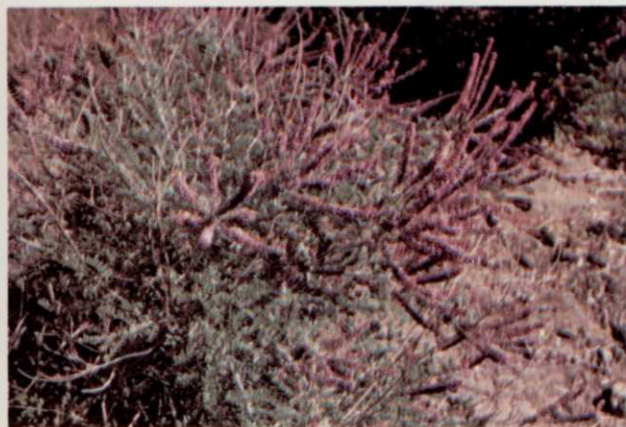
Isanti Dogwood tolerates light shade but is best planted in sun, which brings out the full color of the stems in the winter. It grows in almost any soil and does well in wet places. This cultivar has been planted in our trials since 1970 and has maintained its dwarf-mounded growth habit.

Most honeysuckles are not maintenance free since they become quite large and open with age. *Lonicera tatarica* 'Valencia' is more compact in growth habit than most cultivars of Tatarian Honeysuckle. The foliage is bluish-green in summer and bears pink to white flowers in June. The fruits are numerous, orange, and persist into the winter. The fruits are a little later in developing than most honeysuckles but are high quality.

Philadelphus X lemoinei (Lemoine Mockorange) is a graceful shrub which bears sweet scented, showy, white flowers in late spring. Its erect shoots have exfoliating brown bark. It is adaptable to cold winters and blooms profusely each year. However, very low temperatures could cause some winter dieback.

Sorbaria sorbifolia (Ural False Spiraea) is valued for its large plumes of white flowers in late June into July when not many other woody plants are in blossom. It is one of the first shrubs to leaf out in the spring, and its

Continues on page 18



Short-podded leadplant is adaptable to poor, sandy soils and is easy to transplant.



Korean barberry displays red leaf color in the fall and bright red berries.

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Low Maintenance Shrubs

pinnately compound, bright deep green foliage gives it a medium-textured appearance.

Ural False Spirea transplants readily. However, its suckering habit often makes restraint necessary. It can be used effectively in the shrub border, for massing or grouping, or for a bank cover. This medium-sized shrub prefers moist, well drained soil in full sun or light shade and is winter hardy.

Syringa meyeri (Meyer Lilac) is a well branched upright shrub with a mature height of 5 feet. Its dark green glossy foliage is attractive and long lasting. Flowers appear in late spring in dense upright clusters at the end of branches. They are violet-purple to light lavender in color and have no great fragrance.

Meyer Lilac requires well drained soil and makes an ideal plant for home use because of its moderate size, reliable yearly flowers, small foliage, and freedom from pests.

Viburnum opulus 'Compactum' (Compact European Cranberrybush Viburnum) has a dense growth habit with a mature height of 4 to 5 feet. The white blossoms give a pin-wheel effect because of an outer ring of sterile, showy flowers and an inner portion of fertile, inconspicuous flowers. The blooms appear in mid-May and are borne in flat clusters. The bright red berries make a brilliant show in the fall and winter. This cultivar is recommended for use in smaller areas where space is limited. This plant doesn't seem to be as infested with aphids as the species. It is effectively used in masses or as a specimen plant.

Two shrubs maturing greater than 8 feet in height which are adaptable and more maintenance free include the *Hippophae rhamnoides* (Common Sea Buckthorn) and *Viburnum lentago* (Nannyberry Viburnum).

Hippophae rhamnoides (Common Sea Buckthorn) is best used in masses and shrub borders in naturalistic settings. In March or April, inconspicuous yellowish flowers are borne on bare branches, but in the fall the female plants bear abundant bright orange berries along their stems. Birds dislike the fruit due to its acid nature so it remains on the shrub through the winter until early spring. Both male and female plants are necessary for fruit production. A ratio of 6 females to 1 male is usually sufficient for pollination.

Common Sea Buckthorn prefers full sun and well drained soil — actually performing better in sandy, infertile soil than in rich soil. It also withstands salt spray.

Viburnum lentago (Nannyberry Viburnum) is a vigorous large shrub or small tree that can be used effectively in a background or screen planting. Flat clusters of cream-white flowers appear in late May. The mature fruit is a bluish-black berry which persists into the winter, serving as food for birds. The glossy medium green foliage of summer turns to purplish red in autumn.

Nannyberry Viburnum is easily transplanted and adapts to various conditions in sun or shade. However, it can sucker.

These eighteen plants are examples of woody ornamental plants which have proven to be outstanding for our more rigorous climate over the years. Most of these plants are low maintenance along with offering numerous ornamental characteristics. These plants can enhance residences and at the same time leave homeowners more leisure time.

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