Bulletin No. 657

# Native Plants from Northern Idaho

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AUG 1 7 1987





Cooperative Extension Service

University of Idaho

College of Agriculture

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## **Native Plants from Northern Idaho**

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When walking through the woods or countryside, we often find ourselves so enchanted by the landscapes of nature that we are led to question whether there is an alternative to conventional home landscaping. The use of native plants can be the answer, and when done creatively, may provide the evergreen foliage, fall color, brilliant berries, spectacular bloom or unexcelled fragrance that we find desirable in a domestic garden.

Long ignored by Idahoans, native plants are beginning to take their rightful place in northern Idaho gardens. Although Europeans have long been aware of many of our Northwest natives, they have been largely overlooked in Idaho, where they are best adapted. This is primarily because of the reputation that native plants have of being scraggly and overgrown. However, grown in cultivation, these undesirable characteristics rarely occur. If given proper lighting, moisture and fertility levels, native plants can retain their shape, have many flowers and fruits and need minimum maintenance and care.

The best way to determine the environmental needs for a particular plant is to observe it under natural conditions. Does it prefer moist or dry soil, full sun or partial shade, low or high elevations. By choosing the appropriate microclimate in your garden — i.e. north exposures for shade loving plants, south facing slopes for sun and drought tolerant plants — one can incorporate a wide variety of native species into the landscape.

Care should be taken when digging plants from the wild since delicate ecosystems are easily damaged. The U.S. National Forest Service and Idaho Department of Lands require a permit to remove anything from their land. Check whose land you are on, and always ask permission from the owner.

Another way to obtain plants is to buy from local nurseries. Many of the following native plants are now available commercially.

## **Deciduous Trees**

## Quaking Aspen (Populus tremuloides)

Any visit to Idaho's countryside will help you understand why aspens are quickly becoming some of the most popular ornamental trees in the western U.S. Large groves of these trees grow in moist draws of northern Idaho. Close examination reveals the trembling nature of the leaves, a distinctive feature even during a slight breeze. Another unforgettable aspen characteristic is the beautiful, bright yellow fall color.

Aspen is a fast-growing tree, reaching 25 to 30 feet at maturity. In the home garden, it is most striking when



grown in a grouping. Moist sites with full sun provide ideal conditions for this tree. It is generally an easy tree to grow and maintain. However, excessive rainfall can cause certain leaf diseases.

#### Rocky Mountain Maple (Acer glabrum)

This is northern Idaho's only native maple. It is often confused with vine maple (*Acer circinatum*) that is native in western Oregon and Washington. It is not quite as colorful as vine maple in the fall, but neither is it as



invasive. Outstanding features of Rocky Mountain maple are its red new stem growth and pink tint of seeds in the late summer which give the tree a pinkish-red coloring. Even though fall colors are not spectacular, they are vivid with leaves becoming yellow to crimson.

This maple is a small, multi-stemmed tree 20 to 25 feet tall. If grown in full sun, a nicely shaped, rounded crown will form. The tree is also adapted to partial shade but may be somewhat shrubby under these conditions.

#### Cascara

#### (Rhamnus purshiana)

Summer foliage is the outstanding feature of this tree. Deeply veined, shiny dark green leaves make this tree a distinctive addition to the home landscape. Grown in

full sun and moderately moist soil, this small tree will reach a height of 20 to 25 feet with a perfectly rounded crown. Dark blue to black berries grow in



clusters and ripen in late summer. Though edible, they are of much greater value to birds than humans.

## **Deciduous Shrubs**

#### Serviceberry (Amelanchier alnifolia)

This plant is rarely cultivated in its native range but is a common ornamental in some parts of Europe. Europeans have discovered that this plant has what it takes to earn a spot in home gardens: excellent foliage, flowers and fruit. It is one of the loveliest deciduous flowering shrubs native to Idaho. Showy masses of pure white fragrant flowers, dark blue berries, brilliant fall color and hardiness should make this species popular with nurserymen and homeowners.

This shrub is hard to miss in the early spring since it is one of the first plants to flower. A profuse bloomer, serviceberry is covered with clusters of small, white flowers. By late summer, dark blue, edible fruit has developed.



These berries are quite sweet and are valuable to birds, people and wildlife.

Dry, well-drained sites are preferred to this 6 to 10 foot shrub. Serviceberry is often used for bank stabilization and should do well grown in full sun or partial shade.

## Redosier Dogwood (Cornus stolonifera)

Although this shrub has an interesting display of flowers in the spring, its most showy seasons are autumn and winter. Brilliant red leaves in the fall eventually drop to display bright red branches. The red twigs contrast with the stark whiteness of the snow adding life to the winter garden.

In the spring, white flowers bloom profusely in rounded clusters. They are followed in late summer by white berries that are prized by birds.



Redosier dogwood prefers moist, sunny locations in the garden. It grows rapidly as a well-formed, multistemmed shrub to 9 feet tall. Pruning is necessary to keep new twigs growing at the base. Once the twigs get older, they lose their pronounced red color. This is another plant that has good erosion control qualities and bank stabilization potential.

#### Oceanspray (Holodiscus discolor)

By mid-July, most plants have blossomed and faded, but oceanspray is just coming into bloom. Soft masses of cream-colored flowers are borne in plumes that droop because of their weight. At the height of bloom, the plant is a mass of flowers cascading toward the ground. Brilliant yellow to orange leaves add to its value in the fall.



This medium-sized shrub will reach a height of 7 feet at maturity. It prefers dry, well-drained locations in full sun. As a background for a perennial border, this plant can be outstanding. Once established, it should require little care or supplemental moisture. Dry flower heads tend to persist through winter. These should be removed shortly after blooming to give the plant a neat appearance.

## Mockorange (Philadelphus lewisii)

Idaho's state flower, nursery catalogs offer related species including double forms. In northern Idaho, this shrub starts to bloom anytime from late May through



June, depending on the altitude. It will attain a height of 10 feet but is usually 6 to 7 feet tall. The shrub is a profuse bloomer with pure white flowers normally growing in rather large clusters. The flowers have a delicate fragrance,

similar to those of the cultivated species but not as strong. The showy, relatively large stamens with an abundance of yellow pollen add to the beauty of the flower.

For best growth, this species should be planted in full sun on drier, well-drained sites. Pruning will keep the plant dense and compact.

#### Smooth Sumac (Rhus glabra)

This plant is similar in appearance to the staghorn sumac, *Rhus typhina*. Two forms of the plant are available. The most common form in our area reaches a height of 8 to 10 feet. A dwarf form, *Rhus glabia cismontana*, which grows 3 to 6 feet tall, is also available.

This dwarf form is particularly suited for rock gardens as a miniature tree because of crooked twisting limbs that add interest to the plant. Another positive attribute is the compound leaves



with long pendulous leaflets that give the plant a plume characteristic. In autumn, leaves turn orange-red and radiate with color. Cone-shaped clusters of seeds turn bright red in autumn and add color in winter months.

Once established this plant does not tolerate moist sites. Plant it in a moderately dry location with plenty of sunlight. Like other sumacs, the major drawback is its tendency to grow new shoots (suckers). Minor pruning, however, will keep the area clean of unwanted plants.

## Dwarf Mountain Ash (Sorbus scopulina)

Most people are familiar with the introduced European mountain ash tree (*Sorbus aucuparia*). Idaho's mountain ash looks like a dwarf form of this tree because of similarities in leaf, flower and fruit. Dwarf mountain ash is a multi-stemmed shrub or small tree, 3 to 10 feet tall. It is more colorful than its European counter-

part with its burnt orange fall colors and orange-red berries highly valued by birds. Flowers are white and are borne in a large, flat cluster in June. This native has excellent ornamental potential. When displayed



against the dark background of evergreens or a brick wall, the fruits are very showy.

Although found at lower elevations, mountain ash is most common above 3,500 feet. It is, therefore, tolerant of extreme winter cold and drying winds and is normally found in moist, well-drained soils in full sun or partial shade.

## **Evergreen Shrubs**

All of these evergreen shrubs tolerate sunny, southern or western exposures. Under winter conditions, however, the homeowner should be aware of the potential for winter injury because of extreme cold and drying winds.

#### Oregon Grape [Berberis (formerly Mahonia) aquifolium]

A common ornamental, Oregon grape is one of our best known native species. Evergreen holly-like leaves, clusters of bright yellow flowers and blue, grape-like berries make this shrub useful for residential landscapes. This medium-sized shrub grows 4 to 5 feet tall. Lusterous, dark green leaves turn a purplish bronze in fall and winter and add greenery and color to the winter landscape. Yellow flower clusters bloom in April and May and are quite prominent. Berries are often used to make jams and jellies, or if left on the plants, birds will eat them.

This plant adapts to many conditions — from moderately moist to moderately dry soil and in partial shade or full sun. Oregon grape has many landscaping



uses. It forms a dense evergreen hedge when properly pruned. It also can be integrated with other shrubs as a border or as a foundation planting. These uses, of course, do not rule out its potential as a specimen plant.

#### Mountain Lover (Pachistima myrsinites)

This small shrub is much like boxwood in leaf, size and form. In fact, another common name for the plant is Oregon boxwood. It can be used in many of the same locations as boxwood. However, mountain lover is completely winter hardy, whereas boxwood is only marginally so. It can be grown as a low hedge, used as a foregrond for taller shrubs or as an edging plant.



Occasionally plants will grow as tall as

3 feet, but generally they remain smaller. With its small, lusterous leaves, mountain lover is a finely textured, neat, compact shrub. Lovely, reddish flowers bloom in the spring, but because of their small size, they are generally inconspicuous.

Mountain lover transplants easily into moist, welldrained acid soil that has been well supplied with organic matter (e.g. peat moss). Although it is denser and more compact in full sunlight, this shrub will tolerate partial shade.

## Snowbrush Ceanothus (Ceanothus velutinus)

This broadleaf evergreen has solid, well rounded shape, thick glossy leaves and beautiful white flower panicles. Snowbrush is a dense, low-growing shrub, 3 to 5 feet tall with a rounded top.

This species grows on dry rocky slopes so is best



suited to relatively dry, well-drained soil. Sunny locations are preferred since it tends to become lanky and ragged in too much shade.

Snowbrush is particularly well suited as a low edging in front of taller plants or in a foundation

planting. Prune after the flowers bloom to keep the plant neat and compact.

## **Evergreen Groundcovers**

## Creeping Oregon Grape [Berberis (formerly Mahonia) repens]

A highly adaptable groundcover, creeping Oregon grape will add color and interest throughout your garden. This native plant will thrive in shade or sun and in moderately moist to moderately dry soils. Use this plant as a low edging in front of larger plants, in the rock garden or as a slow spreading, loosely knit groundcover that is easy to control.



Creeping Oregon grape is quite similar to the taller Oregon grape, *Berberis aquifolium*, except in its eventual size of 6 to 12 inches. It has evergreen holly-like leaves, bright yellow flowers and blue grape-like berries that are eaten by birds and people.

#### Kinnikinnick

#### (Arctostaphylos uva-ursi)

Kinnikinnick is a well established ground cover in the ornamental market. Several varieties are available, but our native plants are beautiful, hardy and dependable.

This is a low growing plant with trailing branches spreading over the ground, producing a thick carpet of glossy evergreen leaves. Under optimum conditions, the plant will grow quickly, choking out competing weeds with its dense cover. Pink, bell-shaped flowers bloom



in the spring and brighten the dark green foliage. By late summer, berries turn an attractive bright red, and they often persist throughout the winter. The berries are a favorite of many animals including grouse and bear.

Kinnikinnick is particularly well suited for bank stabilization since it prefers dry, well-drained soils. In fact, this groundcover should not be placed where the ground stays moist for long periods, and once established, it is intolerant of supplemental moisture. Plant kinnikinnick in full sun or partial shade.

## Bunchberry (Cornus canadensis)

This dogwood groundover has all the characteristics of the dogwood tree. The leaves grow on a 6 to 8 inch stem that supports a single white "flower" at the apex. This



"flower" is actually a set of four white bracs surrounding a group of tiny inconspicuous flowers.

Like the dogwood tree, bunchberry, which flowers in late spring, may also bloom again in late summer. By early fall, a cluster of brilliant red berries form at the end of the branch.

This winter hardy native prefers sites where moisture is available year round. It is a good idea to add humus and mulch around this groundcover when planting. Since bunchberry is native to Northwest forests, it prefers full to partial shade and is perfectly suited for northern or eastern exposures.

#### Twinflower (Linnaea borealis)

Twinflower has a great potential as a groundover for moist, shady sites. Small, oval to round, evergreen leaves grow on slender stems that root as they grow over the ground. Although spreading is rapid, it is by no means invasive. Twinflower will often be



seen covering the forest floor or growing over a log or stump. In late spring, delicate twin flowers, which are light pink, form atop a small stalk. Blooms often continue through mid-summer.

Twinflower is extremely cold hardy. It prefers moist, shady locations with plenty of humus in the soil. This is another plant that grows well in northern or eastern exposures in full or partial shade.

## **Evergreen Trees**

#### Mountain Hemlock (Tsuga mertensiana)

Mountain hemlock is native to northern Idaho and grows 50 to 60 feet tall, high in the mountains. Its foliage is gray-green with a silvery cast. Branchlets are unequal in length, overlapping each other to give the branch a full, tufted appearance. Needles are approximatley  $\frac{1}{2}$  to 1 inch long and tend to surround the twig and turn upward. Cones are  $\frac{11}{2}$  to 3 inches long, narrow, cylindrical and taper at each end.

Mountain hemlock has a dense compact form and grows slowly. It makes a good specimen tree but is even more striking when planted in a cluster of three to five.



Balled or burlapped or container-grown plants are easily transplanted in spring or fall. Soils should be welldrained, acidic (pH 5 to 6) and high in organic matter. Hemlock will not do well under hot, extremely dry conditions. Plants grow best in full sunlight, but partial shade or full shade is tolerated.

#### **Douglas-fir**

#### (Pseudotsuga menziesii)

Douglas-fir is widely planted for its beauty in the Pacific Northwest and is also commonly associated with Christmas. Douglas-fir is an important timber tree as well. It is found nearly everywhere in the Pacific Northwest except in the drier regions. The generic name,

*Pseudotsuga*, is derived from the Latin words, pseudo, false, and tsuga, hemlock. This tree appears very much like a hemlock. Douglas-fir cones are unique with threepronged brachts found between the seed scales. The foliage is a dull green, the needles are flat, and the branches are ascending. This species grows fast and reaches a height of 75 to 125 feet at maturity.



Douglas-fir can be used as a specimen tree or as a screen. Balled and burlapped, plants transplant well, and it grows best in slightly acid, well-drained, moist soils. Douglas-fir is best suited to its native areas or to areas where moisture is abundant.

#### Subalpine Fir (Abies lasiocarpa)

Subalpine fir (more commonly called alpine fir) is better suited as a single landscape element rather than in a group. Generally, this tree is pyramidal with a flat, layered pattern growth. With bluish, graygreen foliage and upright cones, this tree is striking enough to be planted in a position of prominence in the landscape. Since its mature height is 30 to 50 feet tall, it may not be for every residential landscape.



Subalpine fir will grow well in partial shade or full sun, but it tends to keep its lower branches if grown in full sun. It requires a moist, cool climate, or it deteriorates rapidly. Soils should be slightly acidic, moist and well-drained. One of its best features is it has few insect or disease problems.

## References

- Hitchcock, C. L., and A. Cronquist. 1973. Flora of the Pacific Northwest. Univ. of Washington Press, Seattle and London.
- Kruckelberg, A. R. 1982. Gardening with Native Plants of the Pacific Northwest. Univ. of Washington Press, Seattle and London.
- Lyons, C. P. 1977. Trees, Shrubs and Flowers to Know in Washington. J. M. Dent and Sons Ltd., Toronto.

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