



## Plants of the Lake Tahoe Basin

### *Ceanothus prostratus* -- Mahala Mat

Mahala Mat is a prostrate or matlike evergreen shrub which is abundant in the southern cascades and northern Sierra. It is generally limited to the mixed conifer or ponderosa pine forest and grows best on well-drained soils in partial shade.

Mahala mat commonly reaches heights of 2 to 6 inches, however it may occasionally grow up to 1 ½ feet tall. The densely branched individual plants may form solid mats 2 to 10 feet broad. Colonies of mahala mat plants, with their spreading and intermingling branches, may form continuous groundcover over extended areas. The green leathery leaves are generally ½ to 1 inch long and serrated along the margins.

The small flowers, blue to purplish in color, are born in small clusters at the end of current year's growth. These flowers give rise to fleshy seed pods which dry and turn reddish at maturity.

#### Establishment and Care

Mahala mat may be propagated from seed or from cuttings. However, the seed may prove to be difficult to germinate and various pretreatments are generally required. Therefore a general broadcasting of the seed may result in poor germination and establishment.

Mahala mat seeds mature in late August and September. The seeds are contained within a capsule or pod. Collected capsules should be stored in paper bags and swallowed to dry until they open and reveal the seeds. The seed has a hard exterior coat and therefore a combination of soaking in hot water and cold storage pretreatments are necessary. Seeds should be placed in hot water, preheated to 180 F, and then allowed to cool and soak for 24 hours.

Following this hot water treatment mix the seed with moist sand, place the mixture in plastic bags and store in the refrigerator.

Periodically check the bags for moisture and for swelling of the seed which indicates that they are close to germinating. Once the seeds have swollen, plant them in containers of potting soil and cover them with approximately ½ inch of soil. After the plants have formed a third pair of leaves they can be transplanted individually to larger ½ to 1 gallon containers. The young plants will be ready for their permanent location in 1 ½ to 2 years.

Container grown plants may be available from local nurseries. Such plants would allow for a more rapid establishment of squaw carpet than any of the previous methods. Container grown stock should be planted such that the root collar is level with the solid soil surface. Dig a hole two to three times the diameter of the rootball and at least six inches deeper. Backfill the hole with six inches of native soil.

Make a few, 1/8<sup>th</sup> inch deep vertical cuts in the rootball, or carefully "tease" roots away from the rootball with your hands to encourage roots to grow into the new soil. Set the plant into the hole and fill in around

the roots, firming the soil with your hands as you fill, until the hole is half full. Fill the hole with water and allow it to settle. This will settle the soil and eliminate air pockets around the roots. Backfill with enough planting mix so the plants will set at the same level it was growing at in the container. Water to allow the soil to settle, then add more soil if necessary. Build a berm of soil to form a watering basin around the outer edge of the hole. Break the basin down after two or three years.

Water requirements will vary with weather, nature of the soil and the age of the plant. Generally, seedlings and younger plants will require weekly to bimonthly watering during the first couple growing seasons. Once plants have established an extensive root system no further maintenance will be required.

### **Uses of Mahala Mat**

Although slow growing, once established mahala mat is a valuable plant for slope stabilization and erosion control. Mahala Mat is also valuable for the favorable conditions it creates for forest reproduction. The continuous cover provides a microclimate of moisture and light conditions.

Resources