

April 2013

# NATIVE NEWS



## NATIVE PLANT REACTIONS TO THE DROUGHT OF 2012

Last summer's extreme heat and drought provided an opportunity to evaluate how plant species were able to cope with moisture stress. The three primary strategies for coping with the lack of moisture that I witnessed among our herbaceous species included drawing on deep moisture through long taproots, going totally dormant until the rains returned, or exhibiting greatly reduced growth.

The classic example of a deeply tap-rooted species displaying little stress from the drought was shown in our [July 2012 newsletter](#). An un-irrigated row of Compassplant (*Silphium laciniatum*), not only grew to its normal impressive stature, it produced the most flower stalks of its eleven years in the ground. Other taprooted species that did not show any evidence of stress or reduced growth included White Wild Indigo (*Baptisia leucantha*) and Round-Headed Bushclover (*Lespedeza capitata*).

Surprisingly, some of the drought tolerant native grasses such as Indian Grass (*Sorghastrum nutans*) and Little Blue-stem (*Schizachyrium scoparium*) went completely dormant in certain (but not all) locations much like cool-season lawn grasses typically do in hot dry weather. Interestingly, when the rains resumed in late summer, they came roaring back to life, rapidly growing several feet and flowering.

The dominant reaction to drought stress among our native herbaceous species was reduced vigor, growth, and flowering. The plants remained green, but were significantly stunted from the lack of moisture, their foliage wilted most of the time. Like the dormant grasses, they rapidly recovered when rains returned in late summer. In fact, most of the fall-blooming species flowered and seeded quite normally.

In all cases, the native herbaceous species that we grow survived the drought, despite the stressed appearance of most species during the worst of the heat and drought in late June and July.

## PLANT FEATURE: WILD STONECROP (*SEDUM TERNATUM*)

A lovely plant of rocky woods and dry wooded slopes, *Sedum ternatum* is an excellent groundcover for dry shade as well. Trailing along the ground, it rarely stands more than a couple of inches in height. White flowers cover the clumps for several weeks in April and early May. The evergreen foliage is compact and tidy all year. It is bright green during the growing season, turning slightly purplish in the winter in exposed locations. It is an excellent groundcover under deciduous tree and along the north sides of buildings. It also thrives in rock gardens and vegetated walls. In its natural habitat, it tends to grow on rocks or steep slopes where the wind typically blows the fall leaves away, so it is recommended to remove the leaves over the winter for best results. In a restoration, use wild stonecrop with other species of wooded slopes such as Celandine Poppy (*Stylophorum diphyllum*), Wild Geranium (*Geranium maculatum*), Short's Aster (*Aster shortii*), Blue-stemmed Goldenrod (*Solidago caesia*), Beak Grass (*Diarrhena americana*) and Short-Headed Bracted Sedge (*Carex cephalophora*).

