



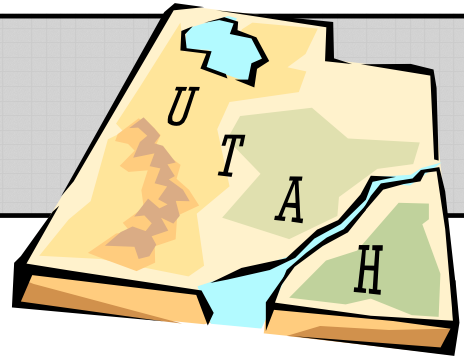
Sego Lily

Newsletter of the Utah Native Plant Society

VOLUME 25, ISSUE 5

SEP/OCT 2002

Creating a Sense of Place Parts II & III



By David Salmon, High Country Gardens

This is the continuation of a three-part article on gardening with native plants. Part 1 is in the Jul/Aug Sego Lily newsletter. Incorporating native plants into your landscape and landscape designs can be a very gratifying experience. The key to success with native plants is learning where the plants are from and what the climate and growing conditions of their native habitats tell us about their cultural needs in the garden.



SEPI/OCT 2002

Creating a Sense of Place, Part II & III

Equestrian Trail Interpretive Sign Project

UDOT Seeks to Reduce Impacts to the Clay Phacelia

New Heritage Garden at Sego Lily Gardens

Events and Chapter News

Many of the non-native perennials that dominate our landscapes have been widely cultivated for many years in Europe and the United States and have very wide tolerances as to the type of climates they enjoy and their cultural needs in the garden. This is in large part because over the years plants that were difficult to grow and propagate using traditional methods disappeared from the trade. Many native plant introductions are very new to the gardening public and their cultural needs less well understood. However, we are already finding that many natives are also easy to grow and propagate and have also become common in gardens across the country. [Rudbeckia fulgida](#) "Goldsturm" (although selected by German breeders) is one of this country's most popular native perennials. To increase the gardening public's use of other native plants, our general knowledge about a native plant's soil preferences, sun exposure, and moisture needs and tolerances must be understood and accompany the plant as it moves from the grower's greenhouse to the homeowner's yard.

The compatibility of a given native plant to your local area is highly dependent on that plant's need for moisture. The amount of precipitation that plants receive in their habitats is a very important piece of cultural information. Looking at a precipitation map of the United States the pattern shows us that, in general, as we move west from the eastern sea-board toward California the terrain becomes drier and drier. Thus plants native to the various desert regions of the western United States will not be well suited to average garden conditions in moist Ohio.

However, in my experience, a native plant from Ohio may do fine in Santa Fe's high desert climate if given enriched soil, sufficient irrigation and afternoon shade to avoid heat stroke.

Soil chemistry and drainage are two other critical factors that must be taken into account. My experience has been that native plants from the east and Midwest make the transition to western growing conditions more easily than western natives transition the other direction. It would seem that many western plants are more specialized and closely matched to the harsh, dry conditions of their habitats and are less adaptable to richer soils and more moisture. But like all generalizations there are notable (and often surprising) exceptions.

Western soils tend to be very mineral (low in organic materials) and alkaline. Many Midwestern soils are humus rich and their pH ranges from neutral to acidic. Eastern soils can be much more variable but in general are acidic. Westerners don't use lime and wood ashes in our soils, as these soil amendments are for making soils more alkaline. Gardeners with acidic soil conditions must raise the soil pH using these additives to provide the alkaline conditions required by many western natives. Many western natives also need higher trace mineral levels and benefit greatly by using trace mineral fertilizers like [Planters II](#) (rock dust in organic gardening circles).



HUMMINGBIRD FLOWER

Moving eastern plants west can be accomplished using lots of greensand and soil sulfur to bring down the soil alkalinity. However, acid loving plants are very difficult to grow long term without constant acidification efforts and use of rainwater to irrigate. (Many western regions have very hard, alkaline well water.)

Soil drainage is a critical but often overlooked factor in growing native plants. Many western natives require fast draining soil when grown in wetter climates, so when gardening in wetter conditions sandy

and sandy loam soils provide drier conditions than clay. Natives that like moister, high humus soils can be accommodated out west by incorporating generous amounts of compost and [Broadleaf P4](#) water retaining crystals into the soil and irrigating more frequently. Clay loving plants are common in all areas of the United States. It is more challenging when we move dry clay lovers from west to east than vice versa. Clay soils that stay wet from plentiful rain and snow will be deadly for dry clay lovers from the west. A

sand/gravel/clay soil mixture used in a raised bed or berm is often the best solution to this dilemma.

I'm not as familiar with native plants from the Midwest and eastern United States, as I don't often have the opportunity to see and study these plants in their native habitats. However I look to the many native plant experts in these regions and trial their introductions in Santa Fe. Interestingly, these regions offer many summer and fall blooming species that are invaluable for coloring the garden when the many late spring and early summer bloomers natives have past. [Solidago rugosa "Fireworks"](#) and [S. sphacelata "Golden Fleece"](#) are two standouts valued for their late summer yellow flowers. The *novae-belgie* and *novae-angliae* Asters from back east are parents to a huge number of hybrids and selections. A favorite selection originally found in the wild is [Aster n.-a. "Purple Dome"](#).

An aster relative that has proven itself as a valued source of long lasting cut flowers is the white daisy flowered [Boltonia asteriodes](#) "Snowbank". *Eupatorium* can be a difficult genus in the high, dry desert of northern NM, but [Eupatorium maculatum](#) "Gateway" is a wonderful exception. It still needs regular irrigation and rich, moisture-retentive soils but will grow well in non-bog conditions. The same is true for several of the *Monarda* cultivars like [Monarda x "Violet Queen"](#). This hybrid has outstanding mildew tolerance and thrives in drier conditions. [Liatris ligulistylus](#) is a superb Gayfeather with long showy purple flower spikes. Of course the [Coneflowers \(Echinacea\)](#) reign supreme in the summer garden. *Echinacea purpurea* and its various cultivars ("Magnus" and "White Swan") are well known. Less familiar but equally deserving a place in the garden are the rare yellow flowered [E. paradoxa](#) from the Ozarks of Missouri and Arkansas and the graceful [E. angustifolia](#), native to the prairies of the Midwest and eastern Great Plains. Almost all of the above natives are highly valued nectar sources for adult butterflies.

The Great Plains provide a treasure trove of tough but beautiful native plants. These plants are adapted to surviving extremes of temperatures and moisture as well as grazing animals. They favor well-drained, not-too-rich soils with a neutral to alkaline pH. Their natural climatic precipitation arrives during the winter, spring and sporadically during the heat of the summer months. My favorites include the duet of [Scutellaria resinosa](#), a mounding blue-flowered beauty and [Hymenoxys scaposa](#), a gray, thread-leaved little gem with yellow daisies. I like to plant these species with plains cacti like the magenta flowered *Coryphantha (Escobaria) vivipara* and the yellow-green flowered *Echinocereus viridiflorus*. Our native cacti are some of our most spectacular but overlooked wildflowers. I encourage their inclusion when planting other xeric (drought resistant) perennial native flowers.

Another outstanding succulent from the plains is the everblooming, magenta-flowered [Talinum calycinum](#). This quirky little native's odd behavior is an excellent example of why some folks avoid native plants, thinking they are too hard to grow--but it's actually a showy, easy-to-grow plant once you understand its needs. I recommend it to everybody. *Talinum* likes dry, sandy or sandy loam soils. It is very slow to wake from its winter slumber, waiting until the late spring frosts have past. It also withers (goes dormant) before frost, using short days as its dormancy trigger. If you didn't know better you would

think the plant either died suddenly in the fall or didn't make it through the winter. However it easily survives the cold winters as a shallow rooted succulent crown (stem at the junction of the roots and above ground stem) that looks like a fat twig. Be patient in the spring because it returns to get bigger and showier every year.

Other indispensable flowering perennials from the Great Plains include [Berlandiera \(Chocolate Flower\)](#), [Calylophus serrulatus \(Dwarf Sundrops\)](#), [Callirhoe involucrata \(Poppy Mallow\)](#), [Liatris punctata \(Gayfeather\)](#) and various grasses like [Schizachyrium scoparium "The Blues" \(Little Blue Stem\)](#) and [Panicum virgatum "Prairie Sky" \(Switch Grass\)](#).

The Great Plants for the Great Plains program sponsored by the Nebraska Statewide Arboretum and supported by NE nurseries that grow and propagate new finds is an excellent program devoted to bringing natives for the plains into cultivation.

Over the past decade, I have focused on finding cold-hardy selections of Southwestern natives. The objective of this work is to expand the usage of these spectacular species beyond the mild winter areas of Texas, New Mexico, Arizona and California. 'Wild Thing' and 'Furman's Red' are two *Salvia greggii* cultivars that have proven cold hardy in USDA zone 6. *Salvia x Raspberry Delight* is a hybrid selection introduced by High Country Gardens in 2000. This ever-blooming hybrid is a cross between *S. greggii* 'Furman's Red' and a high altitude collection of *S. microphylla* from central Arizona. The genus *Agastache* is rich with native ornamental species. These plants have highly aromatic foliage and flowers and are some of our best natives for attracting hummingbirds. *Agastache x Desert Sunrise* is another High Country Gardens introduction. A cross between *A. rupestris* and *A. cana*, this large, long-blooming wildflower hybrid has become one of our most popular plants. Another fantastic and surprisingly cold-hardy hummingbird plant is *Zauschneria arizonica*. As this genus is typically not very cold hardy their use has traditionally been confined to the mild winter regions of California.

I have found that there are four key elements to the successful cultivation of Southwestern natives in cold climates. The first thing is to plant them from spring through late summer. Fall planting doesn't work for most of the Southwestern natives in zones 5 and 6. Secondly, plant in full sun locations where walls, pavement, and large rocks will provide re-

flected heat in the winter months. These hard surfaces provide a warm microclimate and help moderate wild temperature swings caused by cold fronts dropping in from Canada. Thirdly, don't cut these plants back in fall; wait until mid-spring before giving them their spring trimming. And forth, plant in a lean, well-drained soil mulched with chipped gravel to help protect against excessive winter moisture and encourage re-seeding.

The southwest is home to some of our showiest Penstemon (Beardtongue) species. *Penstemon pseudospectabilis*, *P. cardinalis*, *P. pinifolius* (and its numerous cultivars) and *P. palmeri* are all crowd pleasers. Be sure to plant *P. palmeri* in sandy soils; loam and clay soils will kill this lightly fragrant species. I have found *P. pinifolius* to be one of the most widely adaptable of all the Penstemon. 'Mersae Yellow' was originally discovered in England, where it has thrived in that country's maritime climate for many years.



DWARF SUNDROPS

Driving around Phoenix one is immediately struck by the importance of succulents in the landscapes there. Fortunately we're finding many succulents that survive cold winter climates. Hesperaloe (Texas Red Yucca), native to southern Texas and northeastern Mexico has proven to be cold hardy into zones 5, 6 and 7. Previously this ever-blooming hummingbird magnet was thought to be quite cold tender, but experimentation by myself and other native plant gardeners in Colorado proved otherwise. Agave (Century Plant) has numerous species from the Southwest and the Great Basin areas that grow in zones 5 & 6. Agave parryi and A. neomexicana are two larger growing Southwestern species. Dasyliion wheeleri (Sotol or Desert Spoon) with its graceful evergreen foliage and enormous bloom spikes is another Southwesterner that is proving to be more cold-hardy than previously believed. Claret Cup (*Echinocereus triglochidiatus*) is the largest and showiest of our native cacti. It makes a superb companion plant to the other succulents mentioned above.

I have found that some Southwestern na-

tives have expanded a genera's usage from colder climates into warmer ones. The genus Columbine (*Aquilegia*) is an excellent example. Arizona is home to several of my favorites, *A. desertorum* and *A. species Swallowtail*. Both of these heat tolerant species were originally collected by Sally and Tim Walker of Tucson, Arizona. Unlike *A. caerulea* (Rocky Mountain Columbine) these two species have excellent tolerance to dry heat, expanding this

genus' usefulness into warmer areas of the country.

The intermountain region of Colorado, Utah, Idaho, Wyoming and Montana, including both mountainous and high plains habitat, is home to numerous ornamental species. My interests in this region focus on more of the dry land species and don't include plants

best suited to wet and boggy habitats. Penstemon are prominent on that list and include *P. strictus*, *P. barbatus*, *P. eatoni*, *P. virens* and an amazingly xeric species, *P. linarioides* v. *coloradensis*. Colorado Narrowleaf Beardtongue, as it's known regionally, puts on an amazing display of lavender flowers in late spring. But even better is its bright blue evergreen foliage, which gives this little gem year-round appeal.

Antenaria species 'Mc Clintock' is a favorite selection of Pussetoes, a widespread genus in the West. This tight, very low growing cultivar is ideal for planting between flagstone in patio areas. Its silver foliage is very showy. Essentially a non-blooming variety, it doesn't "fall apart" after blooming like most *Antenaria* and always looks good. *Campanula rotundifolia* is another favorite, long blooming wildflower. Useful in both full sun and partial shade, this little bluebells species naturalizes (re-seeds) readily when happy. It is an excellent companion to mountain *Aquilegia* (*Columbine*) like *A. formosa*, a red and yellow flowered species, and *A. caerulea* (Rocky Mountain Columbine) that both enjoy cooler

summer temperatures and moister conditions.

The high, cold desert regions of Nevada, western Utah, eastern California, Oregon and Washington are known as the Great Basin. Amazingly it has only been recently that many of its fantastic ornamental species have found their way into cultivation. *Salvia pachyphylla* (Giant Flowered Purple Sage) should be on top of everyone's list. The seeds of this fascinating species were originally supplied to me through the collecting efforts of Alan Bradshaw (Alplains Seed Company). Native to California, this species has proven itself cold-hardy in Colorado. Numerous native plant enthusiasts in Denver and elsewhere rave about this spectacular native shrub. It has large, pungently scented silver foliage and showy blue and rose-pink flower spikes that begin in mid-summer.

In writing these articles, I have been reminded of how native plants are an indispensable part of any garden or xeriscape. I have not had the room to cover all the species we offer (including

many grasses and shrubs), but I've tried to discuss some of the more interesting, lesser known varieties. Certainly, all of us native plant enthusiasts hope to continue to bring more species and selections (cultivars) into cultivation. The key to this ongoing effort will be to focus on selecting plants that adapt well to domestication and to develop improved methods of propagation and cultivation. Keeping these criteria in mind promises that both experienced and beginning gardeners will enjoy growing natives in their yards and gardens.

High Country Gardens has a full catalog of drought-tolerant plants for the Western garden. Visit their site at <http://highcountrygardens.com>. To subscribe to the free e-zine "Xeriscape Gardening News," send blank e-mail to join-gardens@lists.highcountrygardens.com.

Equestrian Trail Interpretive Sign Project

Partners - Forest Service, Back Country Horseman, Utah Native Plant Society

Do you remember the days before you were an expert on native plants? Do you remember struggling to learn the names of the common shrubs and trees you encountered in your forays into nature? Do you have friends or family members who are trying to learn about native plants?

In Utah's Dixie, a new resource is available for novice plant enthusiasts. A trail leading from the Pine Valley Equestrian Campground to Forsythe Canyon is being fitted with interpretive signs. The signs are tall enough for horse riders to read, but at a height hikers can also read. This project is the brain child of Fred Ybright, wilderness coordinator for the Pine Valley Ranger District. For a long time he has wanted to put interpretive signs along this popular trail that would identify and describe the trees and shrubs that grew there. When he learned that Utah Native Plant Society had purchased a machine that could print high quality signs inexpensively, he saw a chance to make his dream happen. Rebecca Fawson, a Forest Service volunteer and member of the Southern Utah Chapter of the Utah Native Plant Society, wrote 5 line descriptions of the 20 plants found on the trail and found line drawings of them. The Southern Utah Chapter of the Back Country Horseman purchased the materials and made the mounting structures for the signs. Susan Meyer and Bitsy Schultz took the sketches and descriptions, worked their computer magic, and printed off beautiful signs ready to be mounted. This project is unique because of the three partners involved: The Forest Service, The Back Country Horseman, and The Utah Native Plant Society. The logos of all three organizations adorn the signs. The signs will be in place soon, ready to educate trail users and increase their appreciation of the native plants they encounter on beautiful Pine Valley Mountain.

UDOT Seeks to Reduce Impacts to the Clay Phacelia

By Lars Anderson, Landscape Architect, UDOT Region 3

Phacelia argillacea (Clay phacelia) has been a hot topic of debate in UDOT offices for the past few years. UDOT (The Utah Department of Transportation) has been pressured to widen the portion of State Route 6 that runs from Spanish Fork to Price. Some groups have named this stretch of highway as the deadliest in Utah and one of the deadliest in the country. Over 80 million dollars has been allocated for road widening with additional funds on the way. The intent is to eventually have 4 lanes of traffic extending from Spanish Fork to Price. Unfortunately, this runs through prime habitat for the Clay phacelia.

The Utah Endangered, Threatened and Sensitive Plant Field Guide (1991) names UDOT as one of the agencies with "Management Responsibility". That is a scary proposition considering UDOT is more known for its ability to kill plants instead of preserve them. In this case however, great strides have been taken to protect existing habitat allowing for natural propagation of the species. Two years before the project began existing species of Clay phacelia on the hillslopes were identified, mapped and surveyed using a GPS unit. All were then flagged to prevent accidental harm. Next, the roadway designers moved the roadway alignment as far away from the slope as possible and yet still meet federal highway safety standards. Retaining walls were then designed and constructed to reduce the impact to the habitat. These walls would not have been used had it not been in the effort to reduce impact. Finally, Dr. Ron Kass from Intermountain Ecosystems has been hired to supervise construction. His responsibilities include protection of habitat, searching for unmapped plants, and erosion control to prevent further impact on the Clay phacelia as well as to reduce sedimentation into adjacent streams. Later this fall a 3.5 acre wetland mitigation site will be constructed next to the Spanish Fork River near Thistle to mitigate for wetlands lost due to the road project. The mitigation site will restore an old ox bow in the river by removing the

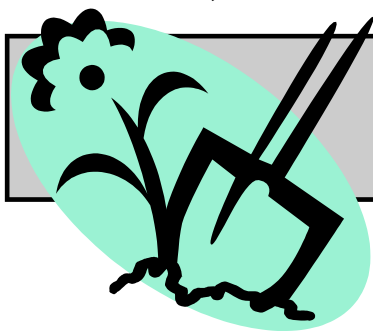
old State Route 6 and surrounding fill lowering the elevation of the site to the level of the river. Riparian habitat, emergent marsh, and wet meadow will be developed in the mitigation site to improve habitat and water quality.

Because it is difficult for the Clay phacelia to survive on the Green River Shale Formations of Spanish Fork Canyon, UDOT is committed to preserving its habitat. As pressure to widen roads and make them safer for the traveling motorist increases, the pressure on habitat for Clay phacelia and other endangered species increases as well. The built and natural environments are not often in harmony. We must continue in our efforts to accommodate the built environment without detrimental effects to our natural environment.

For further information, please contact Lars Anderson at LARSANDERSON@utah.gov.



Figure 1. This talus slope is home to the Clay phacelia. The wall was constructed to prevent impacts to the plant.



Events and Chapter News

Cache Chapter News

Although it's late in the season, we hear that there's still lots to see at Tony Grove in Logan Canyon. We've planned a last minute outing to this beautiful spot on Tuesday, August 20th, 8:30 am. Meet at the Cache County Extension offices located at 1780 N Research Pkwy, Suite 108, North Logan. A group of USU Extension Horticulture Agents from around the state will join us, so don't miss this opportunity to promote Utah's native plants and the UNPS.

You'll soon have another chance to accompany Intermountain Herbarium staff into the field if you missed our *Identifying Northern Utah's Natives* workshop in May. Mary Barkworth & Co. will lead a *Friends in Low Places Tour* on Wednesday, August 21st, 5:30 pm, meet in the parking lot across from the Straw Ibis. Unlike the Garth Brooks song, we won't be barhopping through Cache Valley's exciting tavern scene (sorry). We will, however, venture fearlessly into ditches, canals, and streambanks in search of native grasses and sedges. Thick-soled shoes or rubber boots would be a good idea on this trip.

The almost complete absence of native plants in Cache Valley nurseries continues to baffle our chapter members . . . all the way to the bank. Many thanks to those of you who have purchased plants and posters sold at our Gardeners' Market table or have given up your Saturday mornings to staff the table (special kudos to Dave, Jackie, Dick, and Mary). Also, the *Kjelgren Family* now offers a fine selection of hardy natives at the Market, including many flowering perennials. Finally, *The Garden Niche* and *Virginia Markham Seeds* will return to our Market on Saturday, September 7th with more natives just in time for fall planting. The Cache Valley Gardeners' Market is held every Saturday through October, 8 am to noon, at 100 South Main Street in Logan, just behind Tony Roma's.

Our first *chapter meeting* after the summer break will be held on Saturday, September 14th, in . . . Newton! UNPS member Jim Morris has kindly invited us to the beautiful historic stone home where he has been gardening with natives for twenty years. The newest addition to his landscape is a garden featuring alpinines, most of which he propagated from seed. Bring a bag lunch (drinks will be provided) and seeds or plants to swap. We'll meet at

11:00 am for a quick chapter meeting then break for lunch. The Morris home is located at 190 E 200 S in downtown Newton. Call 435-563-3654 for directions.

It's election season again! The Cache Chapter will vote at the September 14th meeting for a new President to take office October 1st. To get your name on the ballot, please contact Alison Kelly at 435-797-0061 or at ali@biology.usu.edu.

Finally, we must say 'Goodbye' to a creative and supportive chapter member, Wendy Mee. Having co-authored the forthcoming *Landscaping With Utah Natives* (USU Press) and with an MA in Landscape Architecture in hand, she and her family are returning to Ellensburg, Washington. We'll miss you Wendy – good luck!

Ornamental Grasses Workshop

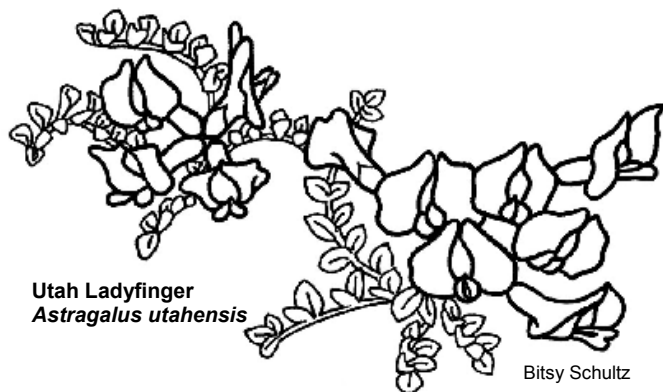
September 21, Saturday 10-noon. Jordan Valley Water Conservancy District. Lecturer: Julie Rotolo, Assistant Horticulturist. Learn about beautiful, drought tolerant ornamental grasses. This class will be held at the JWCD Conservation Demonstration Gardens so the grasses can be viewed in a garden setting. Free. As space is limited, please register at 565-4300.

Volunteers Needed for Wetland Sites

Red-winged blackbirds... Muskrats... Beaked sedge... Dragonfly larvae - committed Utah citizens are encountering and counting all these and more. Utah Division of Wildlife Resources is beginning its third season of wetland monitoring by citizen volunteers, and can use your help. People with interest and/or expertise in birding, water quality, macroinvertebrates, or vegetation are needed to help sample wetland sites in Cache Valley during the Summer 2002 (June through September) and Spring 2003 (March through June). The project includes training by wetland specialists and requires a commitment of 3 hours per month. For more information contact Brian Nicholson or Barbara Daniels at 435 797 8058 or wetlands@utah.gov.

UNPS
Utah Native Plant Society
P.O. Box 520041
Salt Lake City, UT 84152-0041

Non-Profit Org.
U.S. Postage
PAID
Salt Lake City,
Utah PERMIT No.
327



Utah Native Plant Society Membership and Information

New Member Renewal Gift

Name: _____
Street: _____
City/State: _____
Zip: _____ Phone: _____
Email: _____

For more information about the Utah Native Plant Society call:

Bill King: 582-0432
Susan Garvin: 356-5108
Larry Meyer: 272-3275
Or write to: unps@unps.org

UTAH NATIVE PLANT SOCIETY
President: Susan Meyer
President Elect: Larry Meyer
Treasurer: Ben Franklin
Secretary: Therese Meyer
Newsletter Editor: Paula Mohadjer

Check membership category desired:

- Student \$9.00
- Senior \$12.00
- Individual \$15.00
- Household \$25.00
- Sustaining \$40.00
- Supporting Org. \$55.00
- Corporate \$250.00 and up
- Lifetime \$250.00
- Please send a complimentary copy of the Se-go Lily to the above individual.

Please enclose a check, payable to Utah Native Plant Society and send it to:

Membership
Utah Native Plant Society
P.O.Box 520041
Salt Lake City, Utah 84152-0041

Check out our website!
www.unps.org

Many thanks to Xmission for sponsoring the Utah Native Plant Society website.

Please direct all suggestions, articles and events for the newsletter to Paula Mohadjer at paulam@jvwcd.org. **The deadline for next issue is November 14.**

CHAPTER PRESIDENTS
Cache: Tami Coleman
Canyonlands: Karen Dohrenwend & Sarah Haffron
Central Utah Chapter
Mountain: Abby Moore
Price: Mike Hubbard
Salt Lake: Mindy Wheeler
Southern Utah: Mike Empey
Utah Valley: Phil Allen

COMMITTEES
Horticulture: Susan Meyer
Conservation: Bill King
Education: Mindy Wheeler
Invasive Species: Phil Allen
Communications: Paula Mohadjer