Sego Lily

Newsletter of the Utah Native Plant Society

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Aspen Forests Include Trees and Understory Plants

by Marc Coles-Ritchie
Photos by Marc Coles-Ritchie

Aspen forests are one of the most popular forest types in Utah. In summer they produce lush green leaves and valuable shade. In the fall their orange, red, and yellow leaves deliver breathtaking color. Even in winter their white trunks and leafless branches create stark beauty where we snowshoe, ski, or drive. But an aspen forest is more than just beautiful trees, it is also the diverse understory of native plants.

Spectacular tall wildflowers, lush grass, shrubs, young aspen, and other trees make up the understory of aspen forests. Some people are not familiar with healthy and robust understory vegetation of aspen forests because grazing by livestock (cattle and sheep) and wild ungulates (deer and elk) have removed much of that understory vegetation. Over the past 150 years livestock have been introduced to Utah's landscape and the populations of deer and elk have been augmented. Aspen forests can sustain a modest level of grazing, but in many parts of Utah excessive grazing has significantly altered the understory of aspen forests. In many cases this has

Wasatch Mountains, west of Currant Creek Reservoir. Lupine, bluebells, meadow-rue and grass form dense understory in forest with moderate aspen age-class diversity.

resulted in the perpetual depletion of the understories of aspen systems.

There is variability in aspen understory depending on the setting, especially as it affects soil moisture. But regardless of the setting, healthy aspen forests should have robust and diverse understory communities. Healthy aspen forests generally have many tall forbs (wildflowers), a moderate amount of grass, varying amounts of shrubs, soil and rock lichens, and young aspen, which combine to create a dense understory that is difficult to see through and traverse. Depleted, such as overgrazed, aspen forests generally have fewer tall wildflowers, scattered shrubs, few if any young aspen, much bare ground and a very open understory that is easy to physically and visually navigate.

Both the trees and the understory are important for wildlife. Live and dead aspen provide places for birds to build nests or excavate cavities. Fallen logs are important as shelter for other animals. And dense understory vegetation is important for hiding, nesting, bedding, and food.

Aspen forest management is a major issue, and justifiably so, but we should not overlook the *entire* forest for the trees. Aspen recruitment (young trees growing up to replace mature trees) is diminished or lacking due to excessive grazing across Utah. This threatens the

Cover photo: Big Cottonwood Canyon, in Wasatch Mountains. Dense understory of bluebells, cow parsnip and meadow-rue. Photo by Marc Coles-Ritchie.

Depleted aspen stand due to livestock (brown cow in center). Browsed aspen in foreground are less than 1-foot tall. Minimal herbaceous vegetation and much bare ground. Monroe Mountain, central Utah

existence of important forest components. Our management and restoration efforts must consider more than just trees; they must also include the maintenance and recovery of understory vegetation. Therefore, management of aspen forests needs to make understory vegetation a priority, in planning and monitoring, to make sure that it is sustained and improved with any stewardship actions. The goal of restoration should be to restore ecosystems as a whole, both in function and species composition, and understory plants are an integral part of aspen forests.

(A version of this article first appeared in the Western Aspen Alliance's Tremblings newsletter. https://www.western-aspen-alliance.org/)

Little Cottonwood Canyon, Wasatch Mountains, Utah. Cow-parsnip, Jacob's ladder, stinging nettle, geranium and other forbs form dense understory. Red Pine Lake Trail.

Red-naped sapsucker on aspen .

Bird-excavated aspen cavity

Aspen provide bird nesting sites.

Earth Day at Slate Canyon

by Kristina Davis

The photos are by Hayley Haws who volunteers for Conserve Utah Valley as a photographer. The graffiti 'before' photo by Josh Poulson.

The morning of April 24, more than 300 volunteers celebrated Earth Day by improving Slate Canyon's entrance and facilities. In the first of five projects, volunteers hauled branches of gambel oak, Siberian elm and hackberry trees that Provo Parks Department employees had pruned earlier along the bike skills course and access road. Eleven dump truck loads carried the pruning to Provo City Compost center. Along the disc golf course, other volunteers removed myrtle spurge, alfalfa, thistle, Dalmatian toadflax and hoary cress (weeds that Utah County Weed Abatement Supervisor Jake Johnson had recommended be removed from the area).

Wasatch Graffiti Busters who had been working in Little Cottonwood Canyon, led dozens of volunteers in removing graffiti off canyon walls and boulders. The environmentally safe methods are specialized for use in U.S. Forest Service lands.

A third group of volunteers renovated the bike skills course terrain by hauling wheelbarrow loads of soil and reinforcing turns, jumps and embankments.

Volunteers learned about insects, animals and plants of Slate Canyon as they visited education stations prepared by Katy McKnight, Josh Day and their Monte L. Bean Museum staff. Anna Lea Cannon invited people to write their wishes for a future Slate Canyon park on streamers hung on a hackberry branch.

The fifth project kicked off the Wasatch City Nature Challenge by inviting citizens to learn about and document life in Slate Canyon using iNaturalist, led by Erik Johnson, a coalition of UVU and BYU professors, Dr. Ashley Egan,

Michal Rotter, and Erin Riggs. Clint Whipple and Riley Nelson formed Slate Canyon Naturalists to begin a baseline species list of the canyon. The professors and their research assistants led groups in discovering insects, plants and animals of Slate Canyon. Several young people were thrilled to have learned to find termites. One volunteer, a ten year resident of the neighborhood, said, "I learned things about Slate Canyon I never knew and I can't wait to come back and help on other projects."

Slate Canyon Saturdays give people the chance to return monthly for another project and education. On May 22 from 9:30-noon, Slate Canyon Naturalists, Provo City, and Conserve Utah Valley and the Utah County Chapter of the Utah Native Plant Society will host a "Purge the Spurge" campaign. Volunteers begin at the Y mountain Trailhead and the Slate Canyon Trailhead and work along the Bonneville Shoreline Trail. Thirty Spurge Deputies have been trained as we visited seven Centennial Middle School honors science classes and taught them about invasive species disruption of the food web in Slate Canyon. The deputies will help May 22 volunteers identify and remove the spurge. Volunteers please register at conserveutahvalley.org.

Kristina Davis

I was raised on a wheat and pinto bean farm in Filer, Idaho. I have devoted my life to my six children. I studied at BYU and researched at University of Texas at Austin. For the past seven years, I have taught adjunct biology courses and physiology labs at UVU. I love spending time in the mountains and canyons with my family.

Volunteers drag pruning to the road for transport to the city compost station.

Where is Slate Canyon? Straight east from the Provo South University I-15 Exit you see Slate Canyon. Going south from Provo Canyon, you encounter Rock Canyon, Slide Canyon, Slate Canyon, then Hobble Creek Canyon. You can hike up Slate Canyon, hike behind the mountain, rest in the meadow and come down the Y Mountain trail.

Purge the Spurge

On May 22 from 9:30am -Noon, Slate Canyon (details in article)

Naturalists, Provo City, and Conserve Utah Valley and the Utah County Chapter of the Utah Native Plant Society will host a "Purge the Spurge" campaign.

Utah Native Plant Society's 2021 Lifetime Achievement Award

by Wayne Padgett, Happily Retired Co-conspirator in the protection of Utah's Flora

On Tuesday, March 2, 2021, Utah Native Plant Society awarded Dr. Leila M. Shultz with this year's ***Utah Native Plant Society Lifetime Achievement Award***. This award is given by the Utah Native Plant Society (UNPS) to those who have contributed significantly to the knowledge, understanding, and recognition of what a tremendous diversity of amazing plants we have here in Utah. Leila is a much-valued and much-loved member of UNPS and has been since its inception in 1978.

From her small hometown of Bartlesville in northeastern Oklahoma (also home to Frank Lloyd Wright's Price Tower) to Tulsa, Oklahoma; Boulder, Colorado; Claremont, California; and Cambridge, Massachusetts, Leila's path has wound through many different states in her amazing life. Early on, however, she landed with her feet firmly planted in the Intermountain Herbarium at Utah State University, in a place she has called home for at least part of the year since 1973 - Logan, Utah. It is here where Leila began her contributions to our understanding and appreciation that we all share for the amazing diversity of the plants of Utah.

Background

Leila graduated from the University of Tulsa in 1969 with her BA in Biology and French (*C'est Magnifique!!!*). In 1973 she graduated from the University of Colorado at Boulder where she got her MA in Environmental and Systematic Biology. And it was in 1973 that Leila became the Curator of the Intermountain Herbarium at Utah State University where she continued for nearly 20 years. It was during this time that Leila got her PhD from Claremont Graduate University in Botany in 1982.

It was at the Intermountain Herbarium that Leila oversaw the ever-growing plant collections, primarily from the western U.S. but also including substantial collections from around the country and around the world. And during these years, Leila was also on staff with the University of California, Los Angeles in the Department of Ecology and Evolutionary Biology as a Research Associate from 1988 to 1989. In 1992 Leila became a Research Professor in the Department of Wildland Resources at Utah State University, where she has been Emerita since 2006. And, because she obviously needed more things to keep her busy, from 1994 to 2002 she was working as a Research Associate in the Harvard University Herbaria. This on top of her work at USU. *Bored*??? I think not!

Discovery

Leila's taxonomic contributions abound! Through her years she has discovered and described numerous species and has worked significantly in defining and describing many members of the genus *Artemisia* (sagebrush). In fact, she is considered by many as *THE* authority on the taxonomy of sagebrush! And, while she has described or collaborated in the description of five sagebrush taxa, she has also done the same for 13 other species (Table 1).

In 2012, Leila authored the ***Pocket Guide to Sagebrush***, a pamphlet that has become an invaluable assistant to many of us who continue to struggle with this amazingly challenging genus that dominates many of our Intermountain landscapes. It is available to download from https://www.fs.fed.us/rm/ogden/data-collection/pdf/sagebrush_pock_guide.pdf. In addition, Leila also coauthored with Renee Van Buren, Janet Cooper, and Kimball Harper the ***Woody Plants of Utah: A Field Guide with Identification Keys to Native and Naturalized Trees, Shrubs, Cacti, and Vines***, which is available at a local bookstore near you.

Artemisia arbuscula subsp. *longiloba* (Osterh.) **L.M. Shultz**
Artemisia globularia subsp. *lutea* (Hultén) **L.M. Shultz**
Artemisia lingyeouruennii **L.M. Shultz** & Boufford
Artemisia nuttallii (Torr. & A. Gray) Mosyakin, **L.M. Shultz** & G.V. Boiko
Artemisia tridentata nothosubsp. *bonnevillensis* H.D. Garrison, **L.M. Shultz** & McArthur,
Eriogonum ericifolium subsp. *pulchrum* (Eastw.) **L.M. Shultz,**
Eriogonum phoeniceum **L.M. Shultz,**
Eriogonum thornei (Reveal & Henrickson) **L.M. Shultz**
Haplopappus graniticus Tiehm & **L.M. Shultz**
Musineon naomiensis **L.M. Shultz** & F. J. Smith, sp. nov. (Apiaceae)
Orthocarpus holmgreniorum (T.I. Chuang & Heckard) **L.M. Shultz** & F.J. Smith
Penstemon ammophilus N.H. Holmgren & **L.M. Shultz**,
Penstemon pinorum **L.M. Shultz** & J.S. Shultz,
Sphaeromeria compacta (H.M.Hall) A.H.Holmgren, **L.M. Shultz** & Lowrey
Sphaeromeria martirensis (Wiggins) A.H.Holmgren, **L.M. Shultz** & Lowrey
Sphaeromeria potentilloides var. *nitrophila* (Cronquist) A.H.Holmgren, **L.M. Shultz** & Lowrey
Sphaeromeria ruthiae A.H.Holmgren, **L.M. Shultz** & Lowrey
Townsendia smithii **L.M. Shultz** & A.H. Holmgren

Table 1. Plant taxa described by or in collaboration with Dr. Leila M. Shultz.

Leila has worked on a number of large-scale interdisciplinary projects to document biodiversity in Utah and has become an authority on the geography of the Utah flora (Digital Atlas of Utah Plants). In addition, she had contributed ***numerous*** treatments to the Flora of North America including all for the genus *Artemisia*, as well as others for the genera *Allenrolfea*, *Aphanisma*, *Axyris*, *Beta*, *Picrothamnus*, *Polycnemum Sphaeromeria*, and *Spinacia* (http://floranorthamerica.org/ Author:Leila_M._Shultz)

Education

Leila has been a regular teacher at the Teton Science School outside of Jackson, Wyoming where she has taught Field Botany: Flora of the Tetons on several occasions. And beyond that, Leila has also led numerous local field trips in northern Utah for UNPS. In the field, her patience is extraordinaire, and her smile and laugh are contagious. She is always anxious to share what she knows (and what she knows is immeasurable) and does so in way that always illustrates her love of plants and the people with whom she is sharing.

Conservation

Leila has been a leader in the conservation of rare plants, including but not limited to those found in northern Utah. She was a key driver in keeping the reconstruction of US Highway 89 from disturbing the habitat of numerous rare plant species, including the federally listed Maguire's primrose, as well as the narrowleaf wildparsley, Maguire's draba, and Logan Buckwheat. Other rare and endemic species, like the Frank Smith's violet, Logan penstemon, Cronquist daisy, and Holmgren owl's clover have her to thank for their protection over the years.

Support

In 1985, Leila was the catalyst for the rejuvenation of the Cache Valley Chapter of the Utah Native Plant Society. She engaged three relatively young (at the time) and

energetic (again, at the time) individuals to take on the job. Susan Crook, Swede Dahl, and I took on the task of bringing this northern Utah Chapter back to life. It had been dormant for a few years and Leila thought it needed to get back on its feet. Leila was convincing, and her delightful nature was overwhelming. How could we refuse! That chapter continues on today, some 36 years later.

On top of all the above, Leila has contributed nearly 11,000 plant collections, if not more, to herbaria throughout the county and probably beyond. Her energy is contagious. Her heart is huge. And her love and appreciation of the botanical world shows in her eyes and in her actions.

In recognition of her years of *DISCOVERY, EDUCATION, CONSERVATION* and *SUPPORT* of the Magnificent Flora of Utah, the Utah Native Plant Society and all its members want to thank her for all of her tremendous efforts and contributions to the advancement of the love and desire to protect this amazing resource.

HELP FIGHT WEEDS ON OUR PUBLIC LANDS

Please join the Logan Ranger District, Bridgerland Audubon Society, the Utah Native Plant Society and Logan City as we work to protect our land by preventing the spread of noxious weeds in Cache County.

What: 3rd Annual Weed day

When: Saturday, May 22, 2021,
9:00 a.m. – 1:00 p.m.

Where: Canyon Entrance Park Pavilion (First Dam), US 89 & Canyon Road, Logan, UT

Contact: Lisa Thompson, Volunteer and Partnership Coordinator,
lisa.thompson3@usda.gov
801-625-5850

Wear protective clothing, including gloves, long pants, long sleeved shirts, sturdy footwear and bring lots of drinking water. Some tools will be provided but bring your own heavy-duty weeding tools if you can.

The goal of this project is to help reduce and eradicate invasive weeds threatening the native plant community of the local area. Target weeds include, dyer's woad, burdock, houndstongue, Scotch thistle and other invasive weeds. Control methods will include hand pulling, digging and possible bagging.

Volunteers providing service on national forests will follow Federal health guidelines including social distancing while on projects and wearing masks when social distancing is difficult to maintain.

For more information, contact Lisa Thompson, Volunteer and Partnership Coordinator, Logan Ranger District, (801) 625-5850, Dave Wallace, Utah Native Plant Society, (435) 750-5913, or Hilary Shughart, hilary.shughart@gmail.com.

Utah Rare Plant Meeting of the Utah Native Plant Society March 2, 2021

The Utah Native Plant Society held a very successful virtual Rare Plant Meeting on March 2 2021 via Zoom with 14 great presentations. Videos of each presentation have been recorded along with the Lifetime Achievement Award presentation to Leila Shultz and are now available on the **UNPS YouTube page**.

If you enjoy these presentations you might consider donating to UNPS to support research and conservation of Utah Native Plants. As always, we appreciate your support.

Agenda for the Utah Rare Plant Meeting March 2, 2021

8:45	➢ **Log-in**
9:00	➢ **Welcome & Announcements**
9:10	**USFWS Office Updates**. Jennifer Lewinsohn & Rita Reisor
9:30	**Updates from the USU/ State of Utah Rare Plant Team.** Mindy Wheeler
9:50	**Thistle be a mess: Untangling some of Utah's thistle taxonomy.** Jennifer Ackerfield
10:10	**Stunning destruction: Unraveling whether humans or rodents attacked Tiehm's buckwheat (*Eriogonum tiehmii*).** Jacqualine Grant

20 minute break

10:50	**Rare Plants of Utah Fens.** Kate Dwire & Johnny Proctor
11:10	**Conservation Implications from Three Years of Monitoring of Rare Plant Populations in Alpine Communities of the Tushar Mountains, Fishlake National Forest, Utah.** Loreen Allphin, Heather Shipp, Madison Huie, & Steve Flinders
11:30	**What's wrong with Mountain Goats in Northern Utah?** Leila M. Shultz

One hour lunch break

1:00	**Genetic variation is structured geographically within species of *Aliciella* subsection *Subnuda*.** Leigh A. Johnson, Theresa C. Saunders & J. Mark Porter
1:20	~~**Rare plants in Bears Ears Region.**~~ Arnold Clifford is unavailable; he will speak at UNPS monthly meeting on April 6, at 7pm. Bruce Pavlik will present instead.
1:40	**Genome size diversity in the North American deserts endemic genus *Ivesia* (Rosaceae).** Israel T. Borokini, Shaun R. Broderick, Zhi Gao, James A. Birchler, Joshua M. Hallas, & Mary M. Peacock
2:00	**Evaluation of Current and Future Threats to Utah's Listed Cactus Species.** J. Hope Hornbeck

20 minute break

2:40	**Establishment of new populations of endangered Holmgren's milkvetch from direct seeding.** Susan Meyer, Kody Rominger & Bettina Schultz
3:00	**Rarity, drought, and pollinators: What about *Mentzelia shultziorum*?** Mary O'Brien
3:20	**Heliotrope Mountain rare plant surveys and monitoring.** Daniel Lay
3:40	➢ **Concluding remarks and announcements** ➢ **Optional discussion rooms by session, with speakers from that session**

Writing About Trees - The Pleasure and the Pain

by Ronald M. Lanner for The Sego Lily

My lifelong flirtation with trees began (arguably) at about the age of two. The evidence is a photo of me sitting on a concrete wall outside my house on Clara Street in Brooklyn, New York with a severely pruned northern catalpa tree keeping an eye on me from behind. I am pointing at an out-of-sight airplane, another fetish of my childhood, but one which yielded to the much safer interest in trees.

I remember a limby red maple I used to climb during summers in the Catskills as I grew older, and a London planetree whose crown afforded me a view into a friend's second-story sun parlor. His mother was not amused. As the years went by I became a Boy Scout, then a nature counselor at scout camp, and eventually an enthusiast of books on trees and forestry in my high school library. Then, at an outdoor bookstall, I found a copy of William M. Harlow's *Trees of the Eastern United States and Canada, Their Woodcraft and Wildlife Uses* (McGraw-Hill, 1942). This charmingly-written little field guide, which changed my life, still sits before me on my desk. Harlow, an accomplished and prolific writer, photographer, and pioneer of time-lapse movies became my dendrology professor at what is now the State University of New York College of Environmental Science and Forestry at Syracuse University, and many years later he encouraged me to seek a publisher for what became my first book.

That book was followed by five more, all of them about trees. In this article I will try to explain why one might undertake such an onerous task, some ways of going about it, and what the consequences may be. I will draw on my own experiences – the good, the bad, and the ugly – and hope not to dissuade anybody from doing likewise with some of the precious time we get to use in a finite life.

My Books

In chronological order, my books are *The Piñon Pine, A Natural and Cultural History* (University of Nevada Press, 1981), *Trees of the Great Basin, A Natural History* (same publisher, 1984), *Autumn Leaves, A Guide to the Fall Colors of the Northwoods* (NorthWord Press, 1990), *Made For Each Other, A Symbiosis of Birds and Pines* (Oxford University Press, 1996), *Conifers of California* (Cachuma Press, 1999), and *The Bristlecone Book, A Natural History of the World's Oldest Trees* (Mountain Press, 2007). I'll refer to them as **PP, TGB, AL, MFEO, CC,** and **BCB.**

I started **PP** during a sabbatical year in Florida when I came upon interesting ecological information about the pinyon pines in the University of Florida library and spontaneously started combining it with genetic research I had done in the previous few years at Utah State University. I had no idea where I was going with it, but it grew into a magazine-style collection of mainly unrelated articles on such random topics as

systematics, morphology, charcoal manufacture, Native American mythology, pine nut nutrition, forest management and many others. My wife Harriette contributed a section on pine nut recipes. She and I visited 19th century mining towns, Indian reservations, and woodlands in seven states and Mexico. To discuss bibliographic matters and expound on esoterica I added a section of chapter notes in the back of the book, a practice I followed later in **MFEO** as well. That does away with footnotes, which publishers hate, while giving the author a way to add levels of detail. An Ohio publisher held **PP** for eighteen months before going bankrupt, Houghton-Mifflin liked it but felt it was too regional for their list, and then my colleague Bern Shanks suggested the U of Nevada Press in Reno. Their editor, Nick Cady, liked it, accepted it, and predicted it would sell slowly but over a long time. Four decades in print have borne him out.

TGB was written shortly afterwards by invitation from U of Nevada Press. They needed a book on Great Basin trees for a natural history series to be financed by a grant from the Fleischmann Foundation. And financed at a nice level, with high-quality paper and cloth, original sketches, and color plates. An offer no author could refuse! This too was written during a sabbatical. A book like this presents a challenge to the author. It can become an encyclopedic compendium of look-alike chapters, one for each tree species, boringly authoritative and useful at bedtime. Or it can be written as a collection of short stories, actually intended to be read from cover to cover for enlightenment and, one hopes, for pleasure as well. If you aspire to the latter, the trick is to have much more information for each species than there is space for, and then to select different kinds of details for different trees. It also helps to reveal your personal insights into each species, including some that have never before appeared in print.

AL came next. It grew out of a Eureka! moment when I read in the Salt Lake Tribune travel section about the astounding level of fall foliage tourism in the Northeast. Surely those "leaf-peepers" needed a tree book more readable than a field guide when they got off the bus, and I knew there was nothing up to date available. And unlike the Great Basin or the Southwest, this area had a population of ninety million potential customers. As a northeasterner I was already familiar with all the species needing to be covered, but it is my only book that does not include any of my field research. The history of the region gave me the opportunity to include tree-related quotes and tidbits from historic figures like Thomas Jefferson, Benjamin Rush, Charles Sprague Sargent, John Josselyn, William Bartram, Brissot de Warville, and Ernest Thompson Seton. And, the incomparable Donald Culross Peattie.

Listen to Peattie on yellow birch: *Frequently when a Yellow Birch comes to the end of its life-span, it stands a long time, though decay is going on swiftly under the bark. Such a tree is then nothing but a skin of bark stuffed with punkwood. Even this had its use, to the Indians; they collected and dried it, and carried it with them as tinder in which to start a fire by friction.* (A Natural History of Trees of Eastern and Central North America, Ed. 2. Bonanza Books, 1963).

That is great tree-writing.

If I had included only the deciduous trees implied in the title, the book would have been too short – both in pages and appeal. So I included the section "somber evergreens" as the associates of the brighter -hued trees. This little book practically wrote itself, and was done in a couple of months.

MFEO was the most heavily documented of my books, and the most scientifically ambitious. I had so much data, it took me months to settle on a plan for organizing it. The bird people that bought the book would know little about pines, and the pine people little about birds. I had to learn enough about the birds to credibly explain their life histories, anatomy, behavior, evolution and more before I tried to explain the symbiosis. And I had to be sure I was on top of the latest pine information. Otherwise I risked reviews accusing me of being good on pines, bad on birds. Or worse yet, bad on both.

The book came about because I wanted to synthesize my own seventeen years of field and lab research on the symbioses of seed-dispersing birds of the family Corvidae – the jays and nutcrackers – and my long-time favorite conifers, the unwinged-seeded five-needled pines. The main North American trees involved were whitebark pine, limber pine and the pinyon pines, as well as Eurasian species; and the subject-matter areas explored were mainly ecology and evolution. My own personal favorite sentence appears in **MFEO** in describing the enormous longitudinal range of *Pinus sibirica: There are winter days when the sun sets on one forest of Siberian stone pine while it rises on another*. That sentence is not

especially sparkling, but I wrote it with tongue in cheek and then asked a geographer on my faculty to see if it might be true. His software confirmed my guess.

CC grew out of a phone call I took in 1993 from John Evarts, the publisher of Cachuma Press down in Los Olivos. He had brought out a fine book on California oaks and wanted a book on southern desert trees, something with the feel of **TGB**. I begged off because I didn't feel comfortable with those species and that area, but when he mentioned a possible book on the state's conifers I shouted "hell yes, that I can do." John proved to be the kind of publisher few authors are privileged to work with, with very high standards of quality, the willingness to use a magnificent set of water colors by Eugene Murman, and a network of fine photographers. No such book existed, so there were no prior constraints. The challenge of writing multiple essays that did not all sound alike was especially acute with this book, as well as my editor Margie Popper's requirement that every page of text must be fully utilized by text, with no stray words marring the next page. In other words, no widows or orphans; revisions had to fit the same number of spaces they were replacing. The book was readily accepted by California botanists and foresters and in 2013 we did fairly extensive revisions for a fourth printing that killed off the family Taxodiaceae, re-interpreted the nature of Shasta fir, and took gray pine off the California endemics list. The book's appearance coincided with my 1999 move from Utah back to California after an absence of many years.

BCB, the last of the lot. Finally, after two decades of procrastination I tackled the foxtail pine group, especially Great Basin bristlecone pine. For many years I had watched for a scientifically sound presentation of these superannuated high elevation species, but all I could find was spiritual renewal – and plenty of misinformation. I like facts and explanations in my tree books, not quasi religious musings – I guess I'm funny that way – so I was constantly frustrated by the offerings of visitors' center bookstores. Having researched bristlecone morphology and puzzled over longevity issues with a graduate student, I felt it necessary to shed light on those areas. Longevity is often hard to pin down for several reasons (see the book), and can be treacherous ground. And whenever a new "oldest tree" is found, existing books become a bit obsolete. But plenty of facts are out there, waiting to be found and understood, and there are hungry readers looking for sustenance. Readers' most common concern is whether great longevity is wired in as a genetic trait, or if it is merely an environmental artifact. This question is given the attention it deserves.

Why Would You Do This To Yourself?

Red Smith, the famous New York Times sportswriter of the 1940s and 50s, said that writing was easy -- all you do is sit down at the typewriter and open a vein. The act itself is usually less dramatic. But it is a break from most people's everyday routine, and there must be good reasons to do it, or nobody would do it.

Early in my academic career I outlined a book on Southwestern trees, because I was expecting a two-month job cut and thought I would need to put bread on the table. The job stabilized, and the book was never written. Fame and fortune are powerful motivators, though tree books are not famous as wellsprings. I used to pass out to my students an old New Yorker cartoon in which an affluent father is telling his young son as they stroll through the woods, that trees are indeed nice, but there is no money in them.

A book can be a vehicle for change. **PP** was controversial among foresters, and especially range managers, because of its polemical yet scrupulously factual critique of pinyon-juniper forest eradication programs in the West. I did not write the book to influence management of our millions of acres of drought-resistant coniferous woodlands, but in the act of writing it I had to examine the dogmas and blindness to reality that I found to be motivating it. This was not a career booster, and I do believe it had deleterious effects including some I don't even know about. On the other hand, **PP** brought attention to the trees I was profiling, their habitats, and their pre-history. I found myself suddenly in contact with archeologists, anthropologists and paleobotanists who had research questions pertaining to pinyon pine and juniper forests. **PP** also inspired many naturalists to try cultivating the trees, eating or selling the pine nuts, and becoming activists bedeviling the Forest Service and BLM. I still hear occasionally from new discoverers of these humble trees. Of course one cannot foretell the effects of a mere tree book before it appears, as opposed to one on politics or society's latest concerns, but writing one in the hope it will open a dialogue can certainly

be the reason for writing one.

How Should You Write Your Book?

You should already be prepared, long before the bug bites. I learned from my mother while young that "every man knows his trade." So if you want to monograph the roses, you had better know the roses. And you should know them as well as the majority of your rose colleagues know them; and you should expect to learn a lot more while writing your book. Writers of non-fiction should hate being wrong, so they should keep their fingers off the keys until they have learned not to make lots of obvious mistakes, how to identify those they do make, and how to correct them. A devotion to research over an extended period is paramount, because it creates a prepared mind.

You should know your audience. Rick Stetter, my editor for **TGB**, told me to write that book for intelligent but ignorant 14-year-olds. I interpret that as being clear, providing a context, and not dumbing down. I think that was good advice. Would it help the book succeed? An editor from Wiley told me that my book would succeed if it was at least as good as what was already out there, but noticeably different.

I consciously write with my professional colleagues in mind – generally, academics who do tree science of one kind or another. Their approval is important to me because they and others like them, past and present, are responsible for our current repository of knowledge and understanding. But it is gratifying also to run into a non-tree-enthusiast who thanks me for stretching his or her mind.

The act of writing is a very individual thing; writers all have their idiosyncrasies. Some like word processors, others go longhand on legal pads, still others still swear by typewriters, possibly only certain brands and models. A more recent innovation is to sit under the tree of your choice and type into a laptop.

Some writers need a big beautiful desk adorned with family pictures, while others like a battered old bathroom door supported by saw-horses. Daytime, night-time. Music on NPR, dead silence. Whatever makes the juices flow. But never write while driving, drunk or otherwise. And don't write with small children in the room, though dogs are okay.

And most importantly, *speak every written line.* Your book is a conversation with your reader, and the rhythm and sounds of that conversation must click. You will find awkward phrases that way, and word repetitions, and tongue twisting words that make your text clunky. Reading aloud will reveal a boring sameness in sentence length and word choice, and will find blunders that you know are blunders but that you overlooked when you read your text over and over, silently, half putting yourself to sleep.

How Books Die

It is sad to contemplate, but unless your name is Shakespeare or you start a successful religious cult with sacred writings, your book, no matter how celebrated, will probably die before you do. **PP** is still in print after 40 years, but Cachuma Press is a family affair that has just shut down, and **CC** will dissolve when the owners retire. And the publisher of **BCB** has shown impatience with its slow sales.

TGB stayed in print just a few years due to high production costs and slow sales in a thinly populated area. The hardbacks became rare enough to command $125 on Amazon, and I sold one at that price at a CNPS meeting. **AL** was poorly marketed by a publisher that boasted about its marketing prowess. Its absence from the New Hampshire and New York markets was inexplicable and damaging. And the publisher sold out to another publisher who sold out to yet another, neither of whom had a commitment to natural history. So it went out of print after about 25,000 copies sold, far below its potential, I thought. Most disappointing was the poor marketing of **MFEO** by Oxford, the 800-pound gorilla of university presses. Without informing me about it (authors are always the last to know), Oxford "remaindered" several hundred copies of the last print run to Daedalus, which offered them at cost. I bought up a hundred or so which I sold privately over the years, but other customers had to order from Oxford on a print-on-demand basis. You want one, we'll print you one. With black and white photos, not the original color. I have never heard of an author succumbing to heartbreak, though I will believe it if I hear of it.

But it is getting late, and before I put this manuscript to bed I have to read it aloud. To my dog.

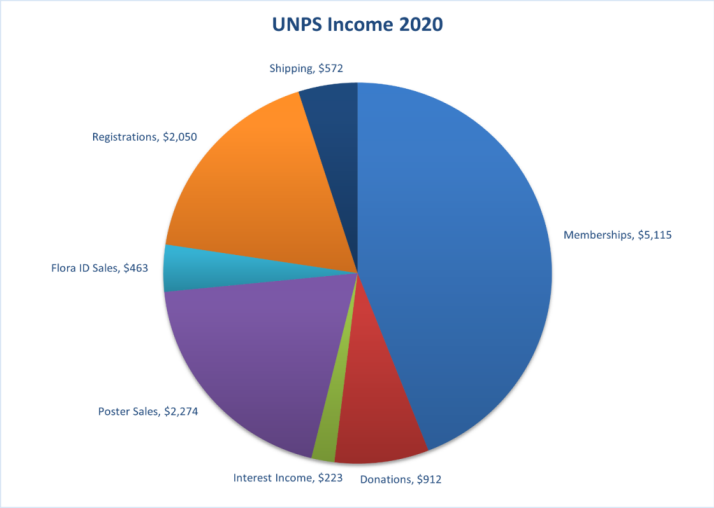
UNPS Fiscal Perspective

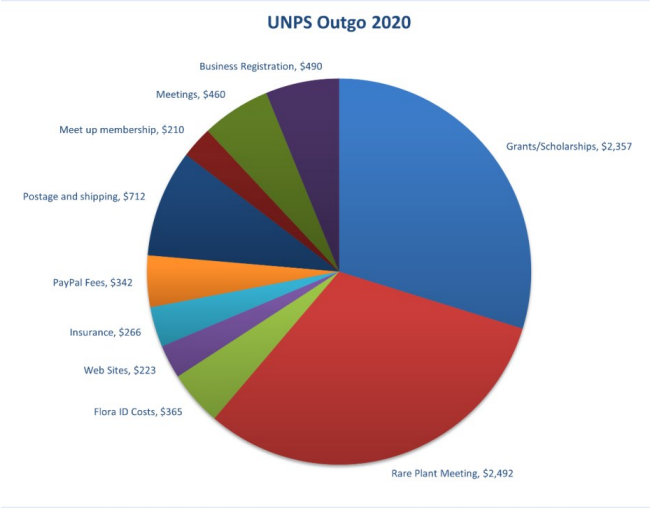
by Bill Stockdale, UNPS Treasurer

Where our money comes from, where it goes.

My desk is surrounded by flowers. Behind me on the wall are each of the two UNPS flower posters. In front of me, the walls have my favorite pictures of the Sego Lily, Western Wallflower, and Arrowleaf Balsamroot. But my computer is showing me the UNPS check register. As the Society's Treasurer I think about more than the beautiful flowers we exist to support. I thought you might be interested in our financial status.

Income for the Society comes from four main areas. First is dues. As of today, we have 236 active members. I expect them to pay a minimum of $2,100 in dues this year. Second is sales from the store. Most of the items





are our two posters, and most of those are purchased wholesale by National Parks and Museums. We also are selling plant identification software from Flora ID. I am budgeting about $2500 income from products. The third major income is from registrations for the annual Rare Plant Meeting where up to a hundred folks spend a day hearing about the status of plants in Utah and status of research about those plants. It is a premier gathering in Utah for botanists, environmentalists, and folks like me who just like our native plants. We do not expect this to be a profitable endeavor, it is part of our mission to educate and inform. The fourth area of income is donations. We have received over $600 so far this year (2021). As you can see in the graph of our income for 2020, the categories also include interest income. We had extra money to put into a Certificate of Deposit, but due to the economy we have not found a certificate with a high enough interest rate to make that an effective investment. However, I check the rates every month. We also have a category of Shipping, which represents the amounts collected by PayPal when an item is purchased from our online store.

Outgo from the Society covers our operating expenses, such as web sites, (about $223 per year as you can see in the pie chart for Outgo), liability insurance (about $260 per year), licenses and fees (shown as business registration in the graph, is budgeted at about $850 this year). Postage and shipping (about $712 last year) is partially offset by shipping costs captured as income from PayPal. We have had success with our Meet-Up group. Over 500 people signed up, some showed enough interest to buy memberships and take part in our events. We budget that at $210 per year.

Although the Rare Plant Meeting was expensive, this year's meeting will be on Zoom, so both revenue and costs will be lower for 2021.

The major Outgo is for grants to researchers, for which we are budgeting about $5,000 for the year. We will be more precise on grants after the Grant Committee goes over the applications, dead-lined for April 15th, and make recommendations. Many of the speakers at the Rare Plant Meeting and in Chapter meetings are recipients of these grants, reporting on what they have been studying. We have supported field studies of many different species, DNA sequencing, use of drones in plant counts, a new book on Utah Penstemons, and several projects dealing with conservation of and growing native plants.

You will be reading more about our grant funding in this issue of the Sego Lily. We have talked with previous

recipients of grants and folks who have applied. We learned that the effort to apply for a small grant is not worth it when the awards are at our previous limit of one-thousand dollars. The Board has lifted that maximum to $2,000 per project for this year. We would like to find a way to make it more meaningful to researchers and have created a plan to solicit donations for our grant fund.

A couple of additional points about the Society. We are a corporation in the State of Utah. The State has designated us as a non-profit company, which has been confirmed by the IRS in granting us status as a 501 (c) (3) organization which means are exempt from collecting or paying taxes. It also means that donations made to UNPS are tax deductible!

Also, we are a volunteer organization – there are no paid employees.

That is the fiscal perspective; we are solvent, and we are making plans to stay that way.

Utah Native Plant Society Small Grants Awards 2021

The board of directors of the Utah Native Plant Society has awarded two research grants for 2021.

Aljexi N. Olson of Utah Valley University was awarded $2,000 for the study of *Pediomelum pariense* (the Paria River Breadroot), specifically "to study what role soil plays in the endemic nature of this species."

The second grant of $1,900 was given to Sallie Tucker at the University of Colorado in support of her research proposal entitled "The Effects of Biological Soil Crusts on Root-associated Fungi Infection Rates of Vascular Plants Across Southwestern Deserts."

These grants continue to support our mission statement at UNPS of research and education. We look forward to hearing more from these studies in the future.

Low pussytoes (*Antennaria dimorpha*), Aster family (Asteraceae). Along Hwy 132, W of Nephi, Juab County, Utah. May 1 2021. Photo by Andrey Zharkikh.

American Penstemon Society Meeting

Friday, July 9 - Monday, July 12
Logan, Utah

Welcome reception Friday night:
Leila Shultz presentation
"What's So Special About Logan Canyon?"

Banquet Saturday night:
Tony McCammon presentation
"An Ethnobotanical History of Penstemon"

Field Trips:
Tony Grove/Mt. Naomi
Bloomington Lake
Paris Ice Cave
Monte Cristo

Registration open to members of the American Penstemon Society.

Online registration and payment instructions: Access the APS website at http://www.penstemons.org/, click on the Meetings link and follow registration and payment instructions for the 2021 meeting.

UNPS Salt Lake Chapter Meeting

Wednesday, June 2nd at 7:00 pm

Zoom Meeting

Steven A. Kannenberg: Rapid and surprising die-back of Utah Juniper due to acute drought stress

Please join the members of the Salt Lake Chapter as we learn more about the ramifications of the decades long megadrought in Utah and the Southwest. Watch for a link to the Zoom meeting that will be sent out by email at a time closer to the meeting date.

Where Can I Buy Native Plants?

by Cathy King

One of the most common questions received by the Utah Native Plant Society is how to start a native plant or waterwise garden. There are many components to this question with hundreds of books written on the subject, but this article is intended to offer some simple pointers and resources.

Gardening means different things to different people. To some, like myself, it is a life-long pursuit of learning and enjoyment (and sometimes frustration). My gardening tastes and interests have evolved over the past 50 years as I have learned more about plants. As a xeric and rock gardener, it is natural to use native plants because they fit in so beautifully.

Some gardeners are very new to the activity or others find it a chore not unlike housework. The styles of flower gardens have a tendency to change over time, not unlike the quirks of fashion, and the most popular style in Utah for many years has been the mixed perennial and annual flower border surrounded by Kentucky bluegrass, based on the traditional English garden. These are lovely old-fashioned gardens that guzzle water like crazy. Lately Utahns have become more water and pollinator conscious and have also become more aware and appreciative of the beauty of our own native plants and would like to learn how to use them in our gardens. Because we are in a transition between the two styles, finding native plants at the average nursery is only starting to become more common. Hopefully, increased demand will improve supply.

If you are a novice gardener and are starting out with a totally new garden space, it is wise to start small and get a little experience under your belt. Choose a sunny site for your garden where you have removed the existing turf or grass if present. Be prepared to do some weeding in this area, weeding is part of gardening. If that is something you don't want to do, I suggest that you leave the area in grass, it will be easier for you to maintain. Research the use of weed barrier cloth before you decide to use it, the negatives outweigh the positives.

A more experienced gardener may have already started to transition to native plants and already knows how important it is to plant in water zones, placing similar plants of similar water needs together. Note the numerous references to "gardener" here. There are many people who don't have the time or inclination to garden and may need to invest in native landscape design companies or consultants and gardening services. This is perfectly acceptable, it's not any different than paying for weekly lawn maintenance.

Native plants do not use as much water as traditional bedding plants, but they do require regular watering when they are getting established, about once a week or ten days, depending on the temperature and low humidity. Once established, many native plants will still require some supplemental watering in the hottest summer months when Utah receives the least precipitation. This can be applied manually or through some form of irrigation, such as drip irrigation. A rock or gravel mulch is recommended rather than bark mulches, which can cause rot around the base of the plants. A rock mulch also helps keep the soil cooler and the water from evaporating as quickly in hot weather and can help control (but not eliminate) weeds.

Plant selection is a personal choice but is not much different than choosing for a perennial border where one is grouping the plants by size, bloom period, and color combinations. If you have small children or grandchildren, beware of planting yuccas, agaves or particularly spiny cactus varieties that can cause injuries. One must also consider whether a plant is poisonous, since either kids or pets might decide to munch on them.

The choices you make for your own garden will be based on how sunny or shady the location might be, the kind of soil you have to work with, and your personal tastes. You might want more flowering plants or a collection of native shrubs and grasses or a combination of all three. Most native plants bloom for a limited period but can be thoughtfully combined to allow for a floriferous display from spring through fall. This takes time, I should know, I'm still working on it. Which brings up another point, native gardens don't exactly come in a box to be opened, watered and presto!--it's complete. They take time to mature and are a continual work in progress. This is true of all gardens.

The list of nurseries below (also on the UNPS website) that offer native plants for sale is by no means complete, but it is a good place to start. Another option is to grow your own plants from seed, but that is a whole 'nother discussion. There are companies on the list that sell native seeds as well. As do most other gardeners, I find I never stop looking for interesting plants.

Also notice that a complete book is available for download on the unps.org website. *Landscaping on the New Frontier: Waterwise Design for the Intermountain West* written by Susan E. Meyer, Roger K. Kjelgren, Darrel G. Morrison and William A. Varga is an incredibly useful

reference book published by Utah State University Press. This excellent book was co-written by Dr. Susan Meyer, longtime UNPS member and former board member who was instrumental in the Utah Heritage Garden Program and the Utah's Choice plant program and is a veritable guru of native plants. A little reading here will reap great rewards.

I highly recommend visits to the outstanding botanical demonstration gardens we are so fortunate to have in the Salt Lake Valley and beyond, such as the Waterwise Garden at Red Butte Garden, Conservation Garden Park at the Jordan Valley Water Conservancy District, the Weber Basin Water Conservation Learning Garden in Layton, USU Botanical Center in Kaysville, the Red Hills Desert Garden in St. George and more. These gardens merit many visits as both learning tools and for just pure enjoyment.

Much of this has been addressed over the years on the unps.org website, just follow the link to the website and click on "Plant Natives" on the menu at the top of the page to find all kinds of useful information.

A topic as broad as this is impossible to cover in one simple article, but let us know more of your questions and we will do our best to answer them. A venture into native plant gardening has many benefits, the one that might surprise you the most is how beautiful it will be.

Native Plant and Seed Sources:

Agua Fria Nursery
1409 Agua Fria Street
Santa Fe, New Mexico 87505
(505)-983-4831
https://aguafrianursery.com/
Native and drought tolerant organically grown plants
No mail order, don't miss if in the area

Alplains Seed Catalog
PO Box 489
Kiowa, CO 80117-0489
http://www.alplains.com/
alandean7@msn.com
Seeds of native plants, cactus and yuccas from the American West
Mail order only

Basil & Rose
2110 Orchard Drive
Bountiful, UT 84010
(801)-797-9792
https://www.basilandrose.com
Retail store with native plant nursery

Ballard's Nursery
691 North State Street
Hurricane, UT 84737
(435)-635-4274
Retail nursery with a selection of native plants

Big Trees Nursery
240 North 100 East
Kanarraville, UT 84742
(435)-867-0341
https://bigtreesnursery.net/
Retail nursery selling native trees, shrubs and perennials

Cactus Joe's Blue Diamond Nursery
12740 Blue Diamond Road
Las Vegas, NV 89161
(702)-875-1968
http://www.cactusjoeslasvegas.com/
Retail nursery and store selling non-hardy cactus and succulents

Cactus & Tropicals
12252 Draper Drive
Draper, UT 84020
(801)-676-0935
https://www.cactusandtropicals.com/garden-stores
Retail store that sells native plants

Cactus & Tropicals
2735 S 2000 E
Salt Lake City, UT 84109
(801)-485-2542
https://www.cactusandtropicals.com/garden-stores
Retail store that sells native plants

Chelsea Nursery
3347 G Road
Clifton, CO 81520
(970)-434-8434
https://www.chelseanursery.com
Retail nursery selling mostly natives
No mail order

Deseret Nursery Perennial Farm
767 Gladiola Street
Salt Lake City, UT 84104
(385-214-9514
http://perennialsforutah.com/
Retail grower of hardy perennials and native plants

Dryland Horticulture
Matthew Utley
1759 Garfield Ave
Salt Lake City, UT 84108
https://www.drylandhorticulture.com/

DrylandHorticulture@gmail.com
Specialty native plants and seeds

Ethical Desert
htts://www.ethicaldesert.com
Cold hardy cactus and succulents
Online catalog/mail order only

Glover Nursery
9275 S 1300 W
West Jordan, UT 84088
(801-562-5496
https://glovernursery.com/
Wide selection of native plants, grasses, trees and shrubs
Retail nursery

Grand Prismatic Seed
Fruit Heights, UT
https://www.grandprismaticseed.com
Seeds for native plants from the western states
Online catalog/mail order only

Granite Seed and Erosion Control
1697 West 2100 North
Lehi, UT 84043
(801)768-4422
https://graniteseed.com/
Seeds, wholesale and retail, many native species
Online catalog/mail order only

Growing Empire
820 Empire Ave
(820 E 3530 S)
Salt Lake City, UT
(801) 466-8267
https://www.growingempire.net
Wide variety of native plants, grasses and shrubs
Retail nursery

High Country Gardens
(800)-925-9387
https://www.highcountrygardens.com/
Native perennials, grasses, bulbs and seeds
Online catalog/mail order only

High Mountain Nursery
(formerly Lone Peak Conservation Nursery)
3645 US-189
Charleston, UT 84032 (outside Heber City)
https://www.highmtnnursery.com
(435)-731-0107
(888)-832-1262
Wide variety of native plants, grasses and shrubs, including wetland species
Retail nursery visits by appointment

Intermountain Cactus
1478 North 750 East
Kaysville, UT 84037
(801)-546-2006
https://www.intermountaincactus.com
Cold hardy cactus including many natives
Retail nursery and mail order

J&J Nursery and Garden Center
1815 W Gentile St
Layton, UT 84041
(385)-262-3017
https://jjgardencenter.com/
Variety of native plants
Retail nursery

Maughan Seed Company
PO Box 72
Manti, UT 84642
(801)-835-0401
Native and wildland seed, wholesale and retail
Mail order only

Millcreek Gardens
3500 S 900 E
Salt Lake City, UT 84106
(801) 487-4131
https://www.millcreekgardens.com/
Wide selection of native plants, trees and shrubs
Retail nursery

Native Roots LLC
2475 East 3600 North
Twin Falls, ID 83301
(208)-944-2717
http://native-roots.org/
Wholesale nursery
Native plants

North Fork Native Plants
116 Mustang Drive
Driggs, ID 83422
Facility in Rexburg, ID
877-444-6996 (Tim Waters)
https://www.northforknativeplants.com
Native plant revegetation and restoration specialists
Wholesale plant nursery

Plants of the Southwest
Santa Fe, New Mexico
(505)-438-8888
https://plantsofthesouthwest.com/
Seed company for native plants
Online seed catalog/mail order only

Prairie Moon Nursery
32115 Prairie Lane
Winona, Minnesota 55987
866-417-8156
https://www.prairiemoon.com/
Native plants and seeds
Online catalog/mail order only

Seeds Trust (formerly High Altitude Gardens)
Seedstrust.com
Wildflower and native grass seeds and mixes
Online catalog/mail order only

Smith's Marketplace & Garden Center
455 South 500 East
Salt Lake City, UT 84102
(801) 328-6000
https://www.smithsfoodanddrug.com/stores/search
Selection of native plants
Retail nursery

Smith's Marketplace & Garden Center
3215 S Valley St
Salt Lake City, Ut 84109
(801) 486-8477
https://www.smithsfoodanddrug.com/stores/search
Selection of native plants
Retail nursery

Sunscapes Rare Plant Nursery
4028 Nature Center Road
Pueblo, CO 81003
(719)-546-0047
http://www.sunscapes.net/index.htm
Choice rock garden, hardy native and unusual dryland plants
Mail order only

Twin Peaks Native Plants Nursery
51 East Lake Fork Road
McCall, ID 83638
(208) 634-3062
Native plants and shrubs
Retail nursery, call in advance

Utah Water Gardens
5911 South 1300 East
Salt Lake City, UT 84106
(801)-590-8516
https://www.utahwatergardens.com
contact@utahwatergardens.com
Wetland native plants
Retail nursery

Valley Nursery
6484 S 2000 E
Uintah, UT 84405
(801) 479-6060
https://www.valleynurseryutah.com/
Wide selection of native plants, shrubs, trees and grasses
Retail nursery

Western Garden Center
550 South 600 East
Salt Lake City, UT 84102
(801)-364-7871
https://westerngardens.com/
Selection of native plants
Retail nursery

Western Garden Center
4050 West 4100 South
West Valley, UT 84120
(801)-968-4711
https://westerngardens.com/
Selection of native plants

Retail nursery

Western Native Seed
PO Box 188
Coaldale, CO 81222
(719)-942-3935
https://www.westernnativeseed.com/
Seeds for plants native to the Rocky Mountains and Great Plains
Online catalog/mail order only

Wildland Scapes, LLC
1471 South Mill Creek Drive
Moab, UT 84532
(435)-259-0820
https://www.revegmoab.com
Ecological and revegetation and native plant nursery
Retail nursery

Willard Bay Gardens
7095 Hwy US-89
Willard, UT 84340
(435) 723-1834
https://www.willardbaygardens.com/
Wide selection of native plants
Retail nursery

Your Membership

Your membership is vital to the Utah Native Plant Society. It is important that your information is correct and up to date for notifications and the delivery of The Sego Lily newsletter.

Any questions about your membership, Contact Tony Stireman, *tstireman@gmail.com*.

Summer is coming soon… It is time to consider another issue of the Utah Native Plant Society *Sego Lily* which relies mostly upon articles from the society's membership. Please submit articles of your native plant stories and photos from hikes and field trips, conservation activities… whatever might be informative and interesting to fellow members.

The *Sego Lily* editors can use most any text format for articles (**PDF is troublesome**). Photos are always best submitted in original resolution and as individual files separate from text. You can indicate desired positioning within a document. We are looking forward to hearing from you. For submissions and/or questions: newsletter@unps.org or cathy.king@gmail.com.

Utah Native Plant Society

Utah Native Plant Society
PO Box 520041
Salt Lake City, UT, 84152-0041.

To contact an officer or committee chair write to
Webmaster: unps@unps.org

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Utah Valley: Robert Fitts

Website: For late-breaking news, the UNPS store (posters, etc.), the *Sego Lily* archives, Chapter events, sources of native plants, the digital Utah Rare Plant Field Guide at unps.org.

Webmaster inquiries at unps@unps.org

Many thanks to Xmission.com for sponsoring our web-site.

Submit articles to Cathy King:
cathy.king@gmail.com

Sego Lily Editors: John Stireman
jstireman@outlook.com
Cathy King *cathy.king@gmail.com*

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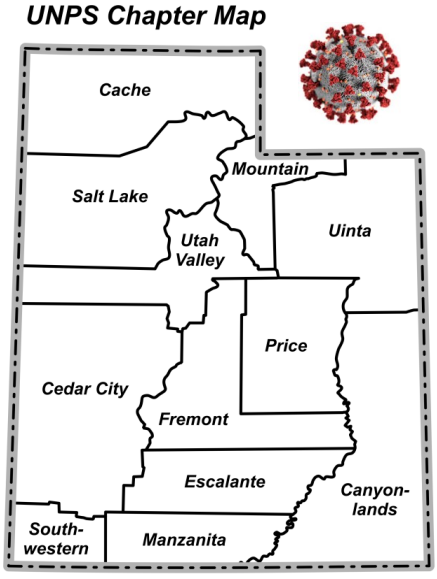
UNPS Chapter Map



Utah Native Plant Society

PO Box 520041

Salt Lake City, UT 84152-0041

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Please enclose a check, payable to Utah Native Plant Society and send to: Utah Native Plant Society
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Salt Lake City, UT 84152-0041

Or easily pay membership with PayPal at
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