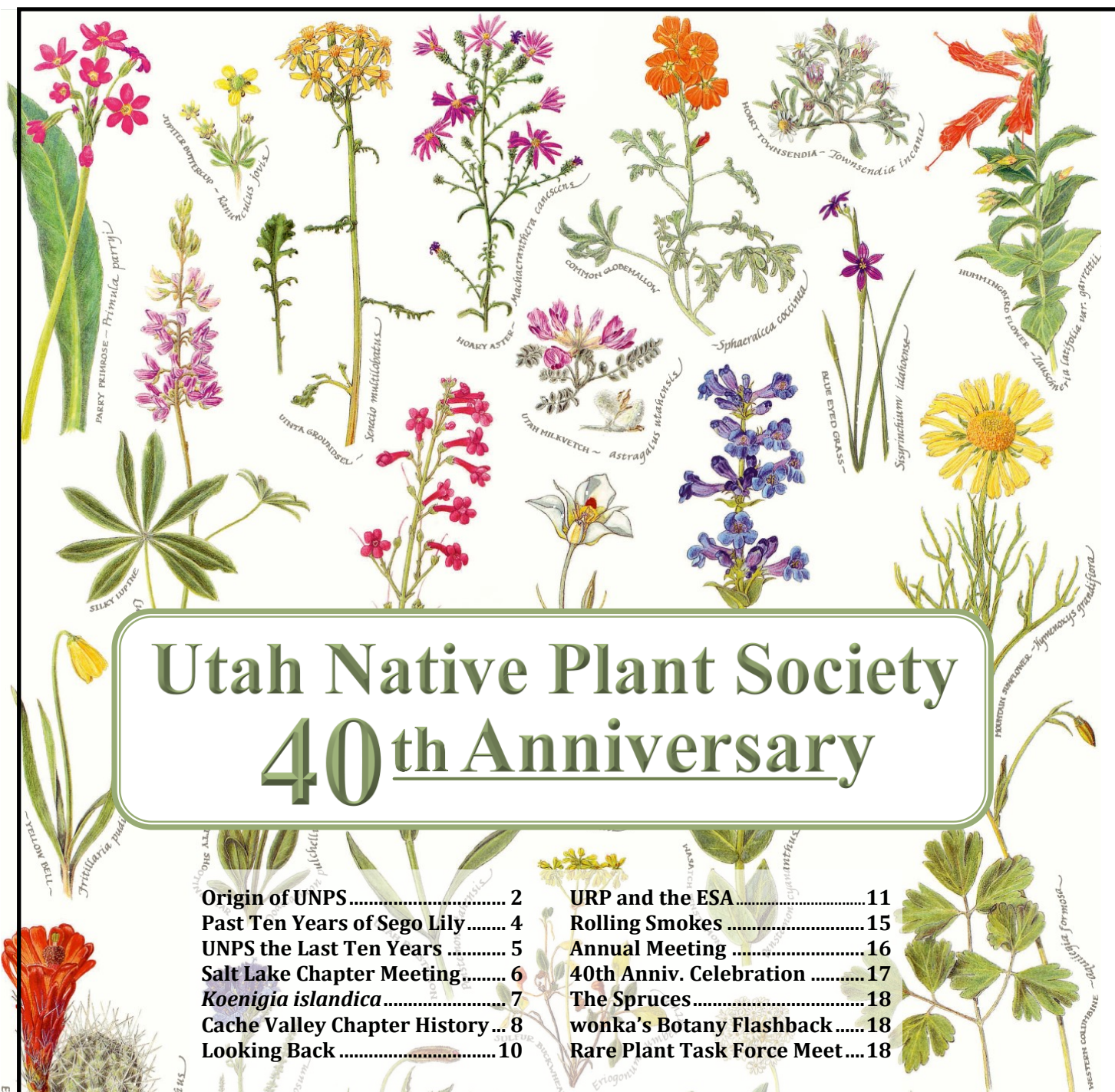




Sego Lily

Newsletter of the Utah Native Plant Society

Fall 2018 Volume 41 Number 4



Utah Native Plant Society 40th Anniversary

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The Origin of the Utah Native Plant Society

Dick Hildreth's article is reprinted from the November 2008, 30th Anniversary issue of *Sego Lily*
<https://www.unps.org/segolily/Sego2008NovDec.pdf>

by Dick Hildreth

As the plane from San Jose, California, settled down over the Great Salt Lake, my head was filled with many questions, but most of all the uncertainty of this whole trip. It began early in 1977 with a phone call from Dr. John M. Tucker, my former major professor and director of the Arboretum at the University of California, Davis. (John passed away July 5, 2008 at the age of 92.) He apologized for calling so late in the process, but he urged me to go check out a new position as director of the State Arboretum of Utah, at the University of Utah. He had recommended me for the position without telling me and now the selection committee was down to three candidates. It turns out that Dr. Walter P. Cottam, emeritus from the Biology Department, was a long-time friend who shared a mutual interest with Dr. Tucker in the genus *Quercus*, the oaks. In 1962 the Arboretum at UC Davis established a 20 acre plot dedicated to an oak collection and named for the founder of the campus, Peter J. Shields. As superintendent of cultivations in the Arboretum I was responsible for propagating and planting the collection. In 2007 the grove was included in the North American Plant Collections Consortium for international teaching and research. In 1964 Dr. Cottam brought some seedlings of his new artificial hybrids between *Quercus macrocarpa* and *Q. gambelii*, which are still growing in Shields Grove.

The first question of course was about the new position at the University of Utah. Meeting me at the airport was someone I had never met. Mike Alder was a member of the State Arboretum Advisory Board (Cottam was chairman) and a member of the interview committee. He was a tall, intense young man who had recently started a new company: NPI (Native Plants Incorporated). From the airport we drove to his research and production facilities, including a house as office/lab (all rented). He showed me his first successful "crop" – 10,000 very healthy seedlings of *Mahonia repens*. There was no

local market interested, so I suggested that he name his own price and ship them all to California, where they sold immediately. Mike became a good friend and colleague. Because of my interest and past experience with oaks and managing the Arboretum at UC Davis I made it through the interview process at the University of Utah and spent a very happy and productive twenty-two years there, including the realization of a dream – the founding of Red Butte Garden and Arboretum. NPI was the only source for Utah native plants for landscape use for some years.

Question two was whether or not there was a native plant display garden. The answer: not really, although NPI had some research demonstration plots at the new location for the nursery in Sandy and some



Mahonia repens by Kaye Thorne from a January 1982 issue of the *Sego Lily*.

plantings at local schools. In later years, thanks to the efforts of Dr. Susan Meyer and many UNPS volunteers, successful seed germination workshops were conducted in various locations along the Wasatch Front. The plants produced were incorporated into numerous collaborative demonstration gardens with schools, communities, and agencies. Next to the ongoing work with Utah's rare and endangered plant species, this horticultural endeavor has generated considerable interest in our native plants and brought many new members into our fold.

The third question in my mind was whether there was an active native plant society. The answer was no, but people were generally interested. I had just helped start the Santa Clara Valley Chapter of the California Native Plant Society in 1976 and the organizational booklet we produced was a good model to follow. There was a large local group called the Utah Nature Study Society started by Dr. Stanley Mulaik and his wife Dottie. I was concerned that a new native plant group would duplicate or compete with them. The Mulaik's assured me the goals were quite different and they would welcome a new native plant society.

Now we (a 2-person staff at the State Arboretum and I) set out to organize the UTAH NATIVE PLANT SOCIETY. The first reality check for me was that I was the new kid on the block and besides: what did I know about Utah native plants? So I made a trip to Provo and BYU to ask Dr. Stanley L. Welsh if he would co-found the UNPS with me. The next step was to plan an organizational meeting at the University of Utah in September of 1978. An auditorium with 300 seats was reserved. People from around the state were invited to the opening exploratory meeting. Botanists from U of U, BYU, USU, the Forest Service, BLM, natural history museums, nature centers, landscape architects, city parks people and students were included. As the keynote speaker I invited Lt. Governor David S. Monson (Governor Matheson was not available).

As the hour drew near for the meeting to start, we all had the jitters wondering if anyone would show up. If not there were a lot of refreshments to consume. Little by little the seats filled and groups congregated in discussion. The final tally was 125! My memory of details is dim now, but the program proceeded something like this: I made the initial welcome and explained why we were gathered. Following introductions, the Lt. Gov. made a presentation

welcoming us and encouraging the formation of the UNPS.

Dr. Stan Welsh outlined what a UNPS should encompass (this talk was expanded and published in a later issue of the *Sego Lily*, the journal of the UNPS). Dr. Duane Atwood was appointed/elected as the first president and a number of others as the first board of directors. I don't know if a copy of the program still exists, or the text of any presentations. There may be a list of attendees in some member's files. All in all the meeting was a success and the UNPS was launched.

It has been particularly gratifying to me to see the growth in the society, the participation, programs, research and education, and rare and endangered species work. Of course none of it would be possible without the dedication of many volunteers. Life members represent a serious commitment. So many people have stepped in when help was needed. Now with nine chapters statewide even more people will become aware of the beauty of our native plants, participate in workshops, and learn about propagation, planting, and landscape use of natives. Others will be interested in using art and photo skills to capture a scene or a closeup of a specific flower; some may be interested in using certain natives in cooking, as medicine, or for perfume. Volunteers are always needed to help eradicate noxious weeds from crowding out our natives. Whatever your interest, come join us and share your joy of native plants.

I look forward to joining members and guests as we celebrate the 30th anniversary of the Utah Native Plant Society on Nov. 7, 2008, at the Sugar House Park garden center in Salt Lake City. This is the traditional "new world potluck" feast for our Annual Members Meeting. Dr. Duane Atwood, the first UNPS president and recent recipient of a Lifetime Achievement Award from the society, will be the keynote speaker. Hopefully Duane can fill in the gaps in my memory of our first meeting in 1978!

This year, 2018, I won't be able to physically travel from my home in Tucson to join in the 40th Anniversary celebration on October 27th at the Provo Library, but will instead join in via Skype and look forward to seeing old friends through new technology. See you then!

For the 30th Anniversary issue of *Sego Lily*, then editor Walt Fertig wrote a detailed history of the newsletter which can be found in the UNPS website archive: <https://www.unps.org/segolily/Sego2008NovDec.pdf>. Walt continues...

Reflections on the Past Ten Years of the *Sego Lily*

by Walter Fertig

It seems hard to believe that ten years have passed since I put together the 30th Anniversary issue of the *Sego Lily*. I can still remember poring through the archive of back issues of the Utah Native Plant Society's flagship publication and trying to make sense of a lot of history that I had not actually witnessed. I was just two years into my tenure as newsletter editor, and while I had been a member and reader since the mid 1990s, the early years of the newsletter were largely a mystery. But thanks to the efforts of Bill Gray and Dave Wallace the entire library of *Sego Lily* issues had been assembled and scanned as pdfs so that they would not be lost to history.

I won't recount the first 30 years of the *Sego Lily* here. That story was told in detail in the November 2008 issue, which is still posted on the Society's website and available for download. Instead, I will focus on the last ten years of the newsletter. This period covers most of my tenure as editor (2006-2016), during which time I produced 54 issues (a record I hope is broken some day).

If I had an editorial credo*, it was to produce a newsletter I wanted to read! So the issues were heavy on science, natural history lore, taxonomy, ecology, weeds, and botanical history. All things that, not coincidentally, interested me. But I also wanted to make sure we had a diversity of other articles, including topics I did not know a lot about. So we had a regular feature "Grow This" about nurturing native plant species in the home garden. Following the long-standing tradition of borrowing stories from other native plant societies, I appropriated most of these articles from Bob Dorn's long-running feature in the *Castilleja*, the newsletter of the Wyoming Native Plant Society (with slight modifications to make the stories more Utah-appropriate). Steve Hegji produced a series of articles on techniques for wildflower photography. Each issue also featured an "unidentified flowering object" (usually a photo from Steve Hegji or Bill Gray) meant to stump our readers. A frequent winner of the contest was a botanist stationed in Antarctica (not much else going on there plant-wise, I suppose!).

Over the years the *Sego Lily* also had regular stories about upcoming chapter and society activities. Once a year there would be a summary of the annual members meeting, usually with an image of people chowing down on fare from the New World Potluck. Often there would

be brief abstracts of papers presented at the annual rare plant meeting sponsored by UNPS and Red Butte Garden. For several years, we covered a number of *Penstemon*-themed events, including the *Penstemon* festival held by the Fremont Chapter and visits by the American *Penstemon* Society. The entire July 2011 issue was devoted to everyone's favorite staminode-bearing plants.

One of the important functions of the newsletter was to inform UNPS members about conservation issues affecting Utah native plants. So a lot of ink over the past decade was devoted to the never-ending efforts to protect Graham's *penstemon* and other Uinta Basin endemics impacted by mineral leasing. The *Sego Lily* also addressed the controversy over releasing non-native mountain goats into the La Sal Range, the mountain pine bark beetle epidemic, the effect of climate change on range management, and the impacts of invasive plant species on the native flora.

In March, 2009, UNPS hosted the 5th southwestern rare plant conference at the University of Utah. The meeting featured 37 presentations and over 20 posters and was attended by more than 150 people. The abstracts and papers derived from the meeting were too long and technical for the *Sego Lily*, and there was uncertainty whether the proceedings would be published by the Forest Service as originally planned, so in 2012 the UNPS board agreed with my crazy plan to publish the papers through the native plant society. From this decision, the *Sego Lily*'s sister publication, *Calochortiana*, was born. From the outset, *Calochortiana* was intended for technical papers pertaining to Utah botany that were too long or not of sufficient general interest for the *Sego Lily*, but which might not be readily published by other scientific journals. The first issue in 2012 included 20 papers presented at the conference and all of the abstracts ran to 238 pages! Two subsequent issues came out in 2015, one a pet project of mine on the flora of Zion National Park (including a key), and the last in 2016 with the updated Utah Native Plant Society rare plant list developed by Jason Alexander and the UNPS Rare Plant Committee.

During my time as editor I benefited greatly from articles submitted by many friends and colleagues. Foremost among these were Bill Gray, Doug Reynolds, Peter Lesica (many of these borrowed from the Montana Native Plant Society's newsletter), Tony Frates, Dorde Woodruff, Ty Harrison, Jason Alexander, Steve Hegji, Bill King, and Al

* Which I didn't... other than my love of footnotes.

Schneider, though I know I am forgetting many others. Receiving manuscripts by email was always a great joy - especially as deadlines loomed and many pages were still blank in the next issue!

Of course I enjoyed writing articles myself - and contributed quite a few (sometimes out of necessity!). Looking back, some of my favorites were on the desert vegetation of the Mojave, the hanging gardens of Zion, the origin of weed species, and changes in angiosperm classification. I liked producing theme issues, such as the tribute to Marcus E. Jones, Utah's irascible pioneer botanist, determining the origin of weeds, the flora of Rainbow Bridge, and the National Parks Centennial issue (my last one, in Summer 2016). Writing columns was enjoyable too, in particular the "ten things you didn't know about..." series on sagebrush, grasses, lichens, and ferns and the irregular feature on Utah plant families and famous botanists who lent their name to genus or species epithets. My least favorite task was writing obituaries.

I left Utah behind in 2013 to take a job as the curator of lichens and database manager at the Arizona State University herbarium. I continued on as *Sego Lily* editor for a time - partly because I still enjoyed doing it, and

partly because no one else was clamoring for the job. I continued as editor for another 3 years, but found it increasingly difficult to continue. First, I convinced the board to change the production schedule from six issues a year to four. But even then I had trouble keeping up, and when I left Arizona for another job I realized it was time to hand the newsletter off. Fortunately, John Stireman stepped in, with the capable assistance of Cathy King. The production values of the new *Sego Lily* are vastly improved, and John and Cathy have been very successful in soliciting articles from a wide variety of members and friends.

Today I am in Washington state, where I am the state botanist for the Washington Natural Heritage Program. As many of you may know, I had been the state botanist in Wyoming before coming to Utah in 2001, so the job is getting me back to my professional roots, albeit it a new state. I still enjoy reading about Utah botany and seeing what my friends and colleagues are up to in the pages of the *Sego Lily*. I am pleased that I played a small role in the continued success of the newsletter and in promoting the good works of the Utah Native Plant Society.

UNPS, the last ten years and beyond.

by Bill King

High Points: Each year for the last ten years UNPS has been a sponsor along with Red Butte Gardens and/or the Garrett Herbarium of the Utah Natural History Museum of the Rare Plant Meeting in early March at the Museum. The one day meeting is well attended and over 100 state botanists, ecologists and plant enthusiasts have attended and heard presentations on the latest rare plant research in Utah.

UNPS continues to award small grants in support of native plant research by giving out two to three grants of \$500 to \$1,000 each annually. UNPS has led the way sponsoring weed pulls and weed exchanges across the state. Recently many other organizations have sponsored their own weed pulls and in total, progress is being made in controlling invasive species.

The Salt lake Chapter under the tutelage of Bill Gray and others has gained much momentum with great speakers and field trips headed up by Wayne Padgett. The Canyonlands Chapter in the Moab area has also become very active.

Walt Fertig was the editor of our *Sego Lily* newsletter for many years and he did a wonderful job that will not be forgotten. Since his departure Cathy King and John Stireman have done a great job as the new editors. It has however taken a whole team of volunteer writers to replace Walt's fascinating prose.

UNPS has joined in with many other plant societies in the Native Plant Conservation Campaign, a project headed up by Emily Brin Roberson, PhD.. who works for the California Native Plant Society. The mission of the campaign is to promote the conservation of native plants and their habitats through collaboration, research, education and advocacy. The campaign gives native plant advocacy a national and unified voice.

Perhaps the most rewarding development in the last ten years has been the increasing use of native and waterwise plants in our landscapes.

Low points: There have also been some low points in the last ten years. Perhaps hardest to take has been the advent of new small enthusiastic chapters of ten or so members across the state and their subsequent failure, in spite of the financial and informational support from the

state board. It seems that these small chapters rely on only a couple individuals to keep them going and when they depart or lose enthusiasm the chapter fails. We have been considering changing the requirement for a new chapter from 10 to 20 or 25 members so the chapter will not be so reliant on just a small cadre.

Losing Walt Fertig and Jason Alexander as well as board stalwarts Larry and Therese Meyer within a two year period left some big shoes to fill but somehow we managed to find some new great people for the board and leadership positions.

Even more difficult to handle was the passing of many wonderful UNPS supporters in the last ten years. The loss of Ty Harrison, Dorde Woodruff, Anne Kelsey, Larry England, Elizabeth Neese, Barney Barnett and many other longtime members left us reeling and saddened.

The future: Writing about the future is way harder than chronicling the past. But some things seem almost certain: population growth, climate change and the march of new technology will accelerate the need for organizations like UNPS.

In 1978 when UNPS was formed the population in Utah was 1.37 million people, forty years later in 2018 the population is estimated at 3.16 million and in another 42 years in 2060 the population is estimated to be 6.84 million. Utah is one of the fastest growing states in the nation. That means we need more of everything: more houses, schools, gas, water, food, in order to sustain our standard of living. Is there room for all these new folks, of course there is, Utah is a big place. But the natural resources of Utah are finite and we are going to have to be very careful that we don't destroy what we liked about Utah in the first place. Our natural wonders and native species will be under continuing population pressure and some may be developed out of existence. There will be lots of work for UNPS and our environmental allies to keep ahead of and limit the developers and resource

extraction companies.

Climate change is another great concern. Estimates of temperature increases of 1 to 5 degrees Fahrenheit by the year 2100 will mean more deserts and droughts and less mountain and alpine environment. How this will affect our rare and sensitive species will depend a lot on where they grow and how well they adapt to their new circumstances but some species will inevitably become extinct without our assistance.

The advent of new technologies like ATV's and the growth of the demand for outdoor recreation is outpacing even the growth of population and putting additional pressure on our natural resources. Our mountains and native plants, especially along the Wasatch Front, are being loved to death by the increasing masses of people that visit them each year. Some of our deserts are also being destroyed.

The day will come when we have to rely on some of the techniques that the National Parks have developed in order to protect our natural wonders. These may include restrictions on where you can go and how to get there (mass transit). Trails may have to be hardened and in some areas permits may have to be obtained for entrance. Entrance fees may be imposed and there may be increased security patrols. You may not enjoy these restrictions but they may be necessary in order to protect our natural environment and the plant and animal species that live there.

What can you do to help out? Reduce your own footprint. Start at home, conserve energy, insulate, use LED light bulbs and toilets that use less than ½ gallon per flush. In your yard, reduce lawn and annual plants and increase native perennial plants and water wise plants. Turn off your sprinklers and water by hand. In the mountains and deserts stay on the developed trails, leave the plants where they grow, unless you have a specific scientific reason and a permit to take specimens. Tread lightly!

UNPS Salt Lake Chapter Meeting

Wednesday November 7th, 7:00 pm: Red Butte Garden classroom

Dr. Mitchell Power, Associate Professor of Geography at the University of Utah and Curator of the Garrett Herbarium, will talk about his research into the history of fire in the Uinta Mountains.

This is a change of venue, since our usual meeting place at REI is not available this month, Red Butte Garden is kind enough to host us instead. Please join us for a timely topic that continues to impact our mountains, forests, and foothills. Light refreshments and social hour. All are welcome, no charge to the public.

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Koenigia islandica, Utah's smallest wildflower?

On an August day in 2000, a small group of botanists were exploring an area east of Gilbert Peak, deep in the Uintas, at about 12,000 feet. They collected a tiny flowering plant growing in moss in an alpine seep. The specimen was incorrectly identified as *Polygonum minimum*, a species already known from Utah, until researchers familiar with the Polygonaceae correctly identified it as *Koenigia islandica* in 2003. This was the first and last time *Koenigia* has been collected in Utah, according to publicly available records. This late discovery follows the pattern seen in other states in the lower 48 where *Koenigia* has been found. Its first discovery was in Colorado when a Scandinavian botanist, familiar with it from his home region, found it in 1953. It was then found in Wyoming in 1959, in Montana in 1979, and finally the Utah collection in 2000. Despite the passage of years, few new locations have been found in any of these states, perhaps because of the plants' small size and special habitat requirements, in addition to simple rarity. It is now considered imperiled in all states where it has been found as well as in several Canadian provinces.

Koenigia, despite its small size and having no special means of seed dispersal, really gets around. It has a northern circumpolar distribution from Alaska across Canada to Greenland, across Eurasia from Scandinavia to Siberia, and then south into the Rockies, Scottish hills, Himalayas and mountain ranges in China. One population is even known in the southern hemisphere from Tierra del Fuego, a jump of more than 6000 miles from its southernmost location in Colorado, with no known occurrences in between. Has it just not been found in the Andes yet or did it migrate down the range but then intervening populations have since gone extinct? Or did it reach the tip of South America by long-distance dispersal, perhaps, as has been suggested tongue-in-cheek, by a constipated Arctic tern on its annual 12,000 mile migration? Recent studies of *Koenigia*'s center of diversity, pollen characteristics, and chloroplast DNA indicate that, as with a number of other species, it likely originated in a mountain range in China before migrating north, around the pole, and then descended south into the temperate mountain ranges where it now occurs.

Koenigia is one of the few known species in any arctic or alpine flora with an annual life history. The standard explanation is that few species have evolved to complete their entire life-cycle from seed to seed during a single, short, cold growing season, often of eight weeks or less.

Typical arctic-alpine plants are perennials that grow slowly and may take years to reach reproductive size. If conditions are bad during any one year, a perennial can persist vegetatively to eventually reproduce. An annual like *Koenigia*, however, must produce at least a few seeds every year (or have some seeds remain viable in the soil) or its population will disappear.

How does *Koenigia* survive in so many different arctic and alpine areas? It has a number of specialized morphological and physiological characteristics. Some of the most important adaptations are its small size and developmental pattern: mature flowering plants are often less than one inch in height with a tiny thread-like root system. They put most of their resources into leaves and flowers unlike most alpine plants that have much of their



Full-grown *Koenigia* plant in flower. Photo by D. Reynolds

biomass belowground. *Koenigia*'s small size and root system restrict it to open habitats with season-long water availability, usually along stream or pond margins in moss or gravel beds where there are few competitors. Its seeds germinate at low temperatures right after snow melt and plants develop very quickly and begin to flower within 4 weeks after producing just a few leaves. Plants continue this indeterminate pattern of growth, making a few leaves and then more flowers until they die with the return of cold temperatures and snow in the fall. In the Beartooth Mountains of Montana plants I studied began to disperse ripe seeds (technically, achenes) after about six weeks. They ripened about 7 seeds each on average, although in a good location or a year with a longer growing season, a few produced as many as 17. Measurements in the field and lab also showed that plants could photosynthesize at low temperatures and relatively low light levels, allowing growth for as many as 12 hours each day during the short alpine growing season. Another adaptation that contributed to success was a high plant survival rate from germination to



Koenigia habitat in the Beartooth Mountains, Montana.
Photo by D. Reynolds

flowering. Self pollination also ensured that some seeds were produced, regardless of pollinator activity which may be limited in harsh alpine conditions. A small percentage of seeds also remained viable in the soil to germinate in a later year.

I believe that *Koenigia* may be more widespread both within and between regions where it is now known to occur. Its very small size and specialized, restricted habitat may make it less likely to be encountered than other plant species. I know that in the Beartooth Mountains I could often find it in new areas whenever I

carefully examined suitable habitat. I have looked for it in appropriate habitats in the White Mountains of New Hampshire and in a few areas in the Sierra Nevada and the Cascades but with no success. It may well be that the greater isolation of those ranges from *Koenigia*'s main circumpolar distribution accounts for its absence rather than an inability to survive. I did read once of someone successfully transplanting it to the Big Horn Mountains of Wyoming, where it had never been found, a practice that should be strongly discouraged. I urge anyone with an interest in rare plants to keep an eye out for *Koenigia* when in Utah's high country. I would also like to hear from anyone about any places they know in Utah where conditions for its survival may be suitable.

References:

Costea, M. and F. Tardif. 2003. *Koenigia islandica* (Polygonaceae) New for Utah. *Sida* 20 (3): 1319.

Long, Cong et al. 2014. Origin area and migration route: Chloroplast DNA diversity in the arctic-alpine plant *Koenigia islandica*. *Science China Earth Sciences* Vol.57 (1): 1–11.

Reynolds, Douglas N. 1984a. Populational dynamics of three annual species of alpine plants in the Rocky Mountains. *Oecologia* 62: 250–255.

Reynolds, D. N. 1984b. Alpine annual plants: Phenology, germination, photosynthesis, and growth of three Rocky Mountain Species. *Ecology* 65 (3): 759 – 766.

A Brief History of the Early Years of the Cache Valley Chapter

by Wayne Padgett

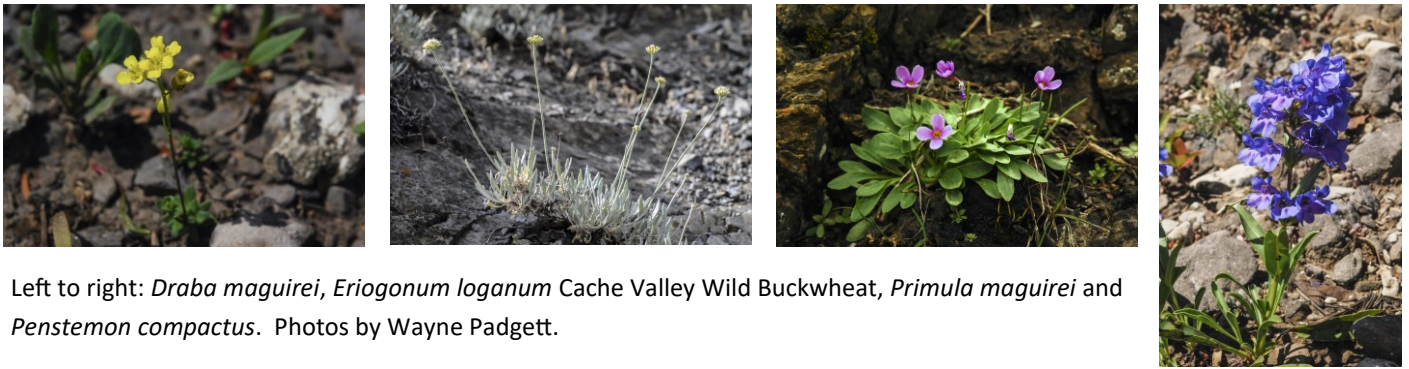
Was it really 35 years ago? My how time flies... I was working for the US Forest Service the summer of 1983, and life was very, very good. I had spent my time working primarily on the Caribou and Targhee National Forests but had the great luck of being stationed in Jackson, Wyoming. A dream job in beautiful country! Late that summer, my supervisor, Andy Youngblood, told me we were headed down to the Salt River Range, which forms the eastern boundary of Star Valley in western Wyoming. We were going to meet a couple friends of his, John and Leila Shultz from Logan, Utah, to look for a population of the newly-described *Astragalus shultziorum*; a milkvetch that had been named after the Shultz family members. It was a cool, brisk, late summer

day. And, after a bit of searching, we found the beautiful little milkvetch adjacent to the trail on which we were hiking. So, what does this story have to do with the Utah Native Plant Society, you might ask?

Well, it has everything to do with UNPS! At least, the Cache Valley Chapter...

It turns out that the following year, Andy and I got transferred to Logan, Utah. Our work was done on the national forests of eastern Idaho and western Wyoming, but we were to continue our efforts at classifying riparian plant communities of the forests of Utah. We both left Jackson unwillingly. Who would want to leave the Teton and nearby Yellowstone National Parks for Utah! Really? Imagine leaving the wildlife, the scenery, the wildflower meadows of western Wyoming. What could match skiing next to the Tetons on bitter cold, clear winter days? But, it wasn't a choice. If we wanted to continue working, we would move to Utah. So, in the early summer of 1984, off we went.

When I came to Logan, I worked at the Forest Service's Intermountain Research Station. My office was just off the east side of the Utah State University Campus within



Left to right: *Draba maguirei*, *Eriogonum loganum* Cache Valley Wild Buckwheat, *Primula maguirei* and *Penstemon compactus*. Photos by Wayne Padgett.

easy walking distance to the Intermountain Herbarium where, guess who, *Leila Shultz was the curator!* Because of the work we were doing, we had collected many, many, many plants that I needed assistance in verification with their taxonomy. At the same time, it was at the Intermountain Research Station that I met Betsy Neely who was working on their Mined Land Reclamation project. And, guess what, *she was the current President of the Cache Valley Chapter of UNPS!* She had followed John Shultz who had started the local chapter around 1982. It was under the loving pressure of Betsy, Leila, and John that I was convinced that I needed to think about taking over work with the Cache Valley Chapter of the Utah Native Plant Society!

Leila and Betsy had piqued my interest in the local flora of northern Utah. Leila had taken me and several others up Logan Canyon to teach us about the several rare and endemic plants that grow primarily on the limestone walls that dominate the area. I got to see Maguire's primrose in bloom in the spring of 1985. It was growing next to Maguire's draba and narrowleaf wildparsley. At the mouth of Logan Canyon was the Cache Valley wild buckwheat; at the time, it was a variety of the shortstem buckwheat. And, up at Tony Grove, she showed us what I still call the Logan (compact) penstemon, which at the time was still a variety of Wasatch penstemon. Now I was young and fairly impressionable. So with much plying, I finally said yes – I would take over the job of leading the local UNPS Chapter. But I could not (**would not**) do it without the help of others.

So, it was later in 1985 that I, along with Susan Crook and Swede Dahl took on the challenge of leading the Cache Valley Chapter of the Utah Native Plant Society. The three of us worked together as a team to find speakers, arrange meeting locations, announce meetings in the University and local newspapers (remember, there was no social media or internet in those days), bring refreshments, and make sure everything went smoothly. It was challenging, and it took some serious time, but it worked. We brought in a variety of speakers. We got many returning participants. Membership grew. And things were moving along smoothly. And the three of us

did this together for three years. We felt we had gotten the Chapter on its feet and, personally, I felt we had done quite a lot to get it there. But after about four years, I was exhausted. I had tapped my energy sources to the max, and it was time for me to move on. In 1989, Swede and Susan formed an Executive Committee with the assistance of Ross Murdock to jointly lead the Cache Valley Chapter of UNPS. In 1990, Swede took over the sole responsibility as Chapter President. It was in 1990 that I moved from Cache Valley because my work station had been changed to the Forest Service Regional Office in Ogden. I was gone from the scene...

Over the years I've lost track of Swede and Susan, but it was the teamwork of the three of us that helped keep the Cache Valley Chapter alive and well. We had worked with the students at the Edith Bowen School on campus to create a native plant garden; one where they could learn about the needs for, and values of native plants in our world. We had built interest in the rare and endemic plants growing in Logan Canyon. We had stopped the realignment of the Logan Canyon Highway to avoid impacts to the habitat and environment of those wonderful species. We had worked with the local climbing community to also avoid impacting the most-rare of the species in Logan Canyon – a challenge that continues constantly with each new generation of climbers that move to the area. We didn't start 40 years ago like the State organization, but the Cache Valley Chapter of UNPS continues as strong as ever. And the needs continue to grow for a focus on native plant materials – for understanding their ecology as well as the critical importance of using them in restoration and in rebuilding resilience to broken environments and habitats. Educating ourselves and others about the importance of native plant materials has never been more critical than it is today. While the Chapter has gone through various names (Cache Valley Chapter, Logan Chapter, Cache Chapter) and has gone from active to inactive at various stages along the way, it has a strong history as a part of the Utah Native Plant Society. Here's to a future that always recognizes the importance of native plants throughout the State!

Looking back – after how many years?

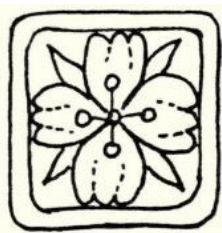
by David Wallace, UNPS Board of Directors

For this 40th anniversary issue I was asked to provide a look back to the early days of the Utah Native Plant Society, but I was not actually there at the very beginning. Instead, my UNPS history goes back 34 years to the Salt Lake Chapter in 1984, so that is when and where I will start. Old memories needed to be revived, however, and for this I am grateful for the work Tony Frates did in digitizing our newsletters (go to www.unps.org, select “Newsletters” and “Access latest and prior issues”).

I had been an undergraduate botany major and I had a strong interest in native plants, so I was pleased to find a newspaper announcement for the Salt Lake Chapter of the Utah Native Plant Society. I attended a couple of meetings when newsletter editor Kathryn Mutz asked me to write a meeting report, and this early 1984 action was the beginning of my UNPS service. In 1985 I became Salt Lake Chapter president, UNPS President-elect in 1986, UNPS President in 1987 and Chairman in 1988! I often wonder what my UNPS activity would have been if Kathy had not made the initial effort to get me involved.

In that pre-internet era we used postcards to remind members of upcoming meetings and events. I remember the monthly “parties” when UNPS volunteers met at someone’s house to stick address labels on hundreds of blue postcards and carefully sort them to comply with the post office’s requirements for bulk mailing. We did this for the newsletters, too.

The UNPS newsletter was named *Sego Lily* in 1982, but the current masthead was not designed until 1987. The first newsletter in 1978 used an unusual image, a stylized flower that must be a representation of *Frasera speciosa*, the monument plant or elkweed. Beginning In 1982 the masthead image was changed to a stylized sego lily drawing by Kaye Thorne.

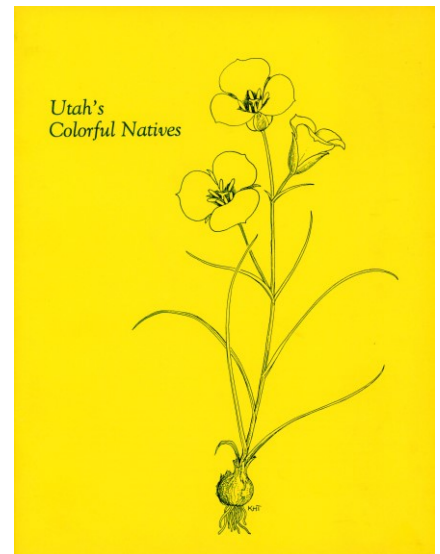


1978 image (left) *Frasera* (center) and 1982 Sego Lily (right)



As new UNPS President, I worked with Lisa McClanahan, our new newsletter editor, to help assemble the first newsletter of 1987. We met after hours in her graphic design workshop at the VA, where I watched with awe as she created the layout, selected a font for the lettering and used Kay Thorne’s botanical illustration from *Utah’s Colorful Natives* to complete the design. Lisa’s masthead design has graced the *Sego Lily* newsletter ever since.

I still have a few copies of the 1981 UNPS publication *Utah’s Colorful Natives*. Ostensibly a coloring book for children, 6 of its 8 pages feature botanical drawings to raise awareness of Utah’s threatened and endangered plants.



There were many field trips in the 1980s in addition to the monthly chapter meetings. These included trips up Little Cottonwood Canyon to see the Albion Basin wildflowers, of course, but there also were long-distance fieldtrips on weekends. For example, every summer there was a mushroom trip to the western Uintas, there were trips to Great Basin National Park and trips to southern Utah. I especially remember trips to the St. George area to see the endangered bearclaw poppy, *Arctomecon humilis* and to learn what could be done to help save it.

This was during this period that we developed our wildflower poster. Jo Stolhand’s poster committee met to decide which wildflowers to put on the poster. Dave Gardner then had to find the plants we chose so he could make the colorful drawings – I think we paid him \$500 for the whole project. UNPS didn’t have enough money

to print the posters so we borrowed \$2000 from The Nature Conservancy, a debt we quickly repaid from poster sales (for example, in the January 1989 *Sego Lily* we encouraged readers to purchase posters for Mother's Day gifts). In 2016 I had the opportunity to reprint the posters, as reported in the Winter 2017 issue of the *Sego Lily*.

In 1989 I was UNPS Treasurer, but after that my UNPS participation came to an end for the next decade. Overwhelming family and career pressures kept me away, and I even let my membership lapse (as a lifetime member I no longer worry about renewing).

For this 40th anniversary edition, however, I also was asked to provide more recent information about the Cache Chapter. My Cache involvement began when I reconnected with UNPS after a 1999 move to Logan. The Cache Valley Chapter was created in the mid-1980s under Wayne Padgett's leadership, but it had become inactive by the mid-1990s. In 2000, Loralie Cox,

Horticulture Extension Agent for Cache County and leader of the Cache Master Gardeners, charged Tami Coleman, a new Master Gardener, with the task of reinstating the Cache Chapter UNPS.

Tami was able to restart the chapter by 2001 and she became president. She arranged meetings, organized tours of local water-wise landscaping, worked with Susan Meyer to sponsor propagation workshops, arranged fieldtrips, etc. However, I chose to stay away from leadership roles in the Cache Chapter, instead I rejoined the UNPS Board of Directors in 2003 and I have remained active with the Board ever since.

My UNPS experience has shown me how much Chapter success depends on enthusiastic leaders. Under the UNPS bylaws, chapters can be created if there are at least 10 local members, but often these smaller chapters are not sustainable as leaders move away or "burn out". Now this may be happening with the Cache Chapter.

Utah Rare Plant Meetings and the Endangered Species Act

by Tony Frates

In preparing for the annual Utah rare plant meeting in 2017, the question arose as to how many rare plant conferences the Utah Native Plant Society (UNPS) had hosted. In researching that history, and reviewing our earliest announcements and newsletters, I started to then wonder to what extent the origins of UNPS, and for that matter other native plant societies particularly in the western United States, were linked in any way to the Endangered Species Act of 1973 (as since amended). At that conference I spoke about this briefly, but there wasn't much time available to go into any great detail. Now that UNPS is about to reach its 40th anniversary, it seems even more appropriate to consider what extent the Endangered Species Act played a role in our origin and in our formative years, and to make other connections about our past.

A growing awareness of the importance of the natural world had begun to percolate in the minds of Americans as the natural beauty of the western United States began to be explored and described (although the seed had been planted by earlier writings by Thoreau and others) in the 19th century. Writings, photographs and

drawings made their way into the imagination of the public, and ultimately created respect and awe for our rugged and scenic landscapes.

But it took time; almost too much time. Despite the national park designations of Yellowstone in 1872 and Zion National Park in 1919 (and at least nine others in between almost all exclusively in the western US), a consciousness about our impacts on the natural world remained obscure, and despite the federal agencies that were also subsequently created to better manage increasingly degraded public lands. Dr. Walter Cottam, born in Utah, spoke out about grazing impacts culminating in his "Is Utah Sahara Bound?" speech in 1947, the year of Utah's centennial, but it largely fell on deaf ears. Aldo Leopold's "A Sand County Almanac" was first published in 1949 and highlighted destructive impacts on nature by people. Not until sometime after Rachel Carson's "Silent Spring" in 1962 however did a true environmental movement begin. The first Earth Day did not occur until 1970. In 1966, the federal Endangered Species Preservation Act was created to protect animal (but not plant) species. In 1969, its scope was expanded to include animal species threatened worldwide and not just in the U.S. and renamed the

Endangered Species Conservation Act. Finally in 1973, the Endangered Species Act (ESA) was passed, superseding earlier acts and adding protection for plants. The act had very strong bipartisan support, was passed unanimously in the Senate, and nearly so in the House, and was signed into law by a Republican president.

There were some earlier state laws (none in Utah) that attempted to protect plant species, but the laws of most states even to this day are nowhere nearly as comprehensive as the federal laws, and they have generally been less effective than the ESA in conserving at risk species.

The ESA era begins

As directed by the 1973 act, in 1975 the Smithsonian Institute produced a report of some 3,000 plant species to be potentially considered for threatened or endangered status. It was then from this list and the active involvement of native plant societies, in part, that refinements and recommendations were made in an attempt to prioritize the “most threatened” species into various categories, leading to the first ever plant species being listed in 1977. From Utah, the first two species to be listed, and not long prior to the formation of UNPS, were *Astragalus perianus* (May 7, 1978, delisted in 1989), and *Phacelia argillacea* (listed on September 28, 1978, and still listed as endangered; and it can be argued that its continued existence is because of the ESA). Those two species were discussed in the very first UNPS newsletter published in November of 1978 (see: <https://www.unps.org/segolily/archives/Vol011978.pdf>), followed by ESA listings for several other plant species in late 1979.

UNPS in the beginning

UNPS was initially formally incorporated on December 19, 1978 after prior initial meetings in the fall of that year leading to its incorporation. It was during a time when a flurry of other state native plant societies were also being formed (see state list table). This prompted me to call Dick Hildreth in 2017 to better clarify in my own mind the sequence of events that led to the creation of UNPS (because my own active involvement with UNPS did not start until 1981) although Dick already covered that to a large degree in his excellent article “The Origin of the Utah Native Plant Society” which occurred in our 30th anniversary issue and is reprinted in this issue.

State	NAPS formed	Misc. comments
Oregon	1961	Works tirelessly for plant/habitat conservation; Oregon mini-ESA achieved (Dept of Ag. 603-0703 Wildflowers and Endangered, Threatened, and Candidate Species since at least 1989, 59 plant species currently listed)
California	1965	Native Plant Protection Act 1977; CESA 1984
Nevada	1975	Nevada endangered plant law 1969 (NRS 527.260 et seq) under Div. of Forestry; as with other NAPS, started out of a general interest and increasing awareness of native plants
Colorado	1976	Founding prompted by an early 1976 T&E workshop led by Denver Audubon and USFS
Arizona	1976	Horticulture focus but second meeting: rare plants/gov. Agencies; Dept of Ag. Protected Native Plants law
New Mexico	1976	First newsletter Mar. 1982 featured the ESA
Washington	1976	Has long supported protection for rare plants
Idaho	1977	27 th rare plant conf. in 2016
Utah	1978	Horticulture and rare plant focus from the beginning
Texas	1981	
Wyoming	1981	
Montana	1987	

It is clear that Dr. Walter Cottam was a focal point in the history of a number of organizations and it was through his working with Dr. John Tucker at the University of California, Davis that led to Dick coming to Utah and the formation not long after of UNPS (see Cottam connections). Appropriately, Dr. Cottam was presented with an honorary UNPS lifetime membership on May 4, 1979 at a ceremony held at the University of Utah Research Park.

UNPS rare plant meeting history

Very quickly, rare plants became a key focus for UNPS. The earliest newsletters tended to be dominated by issues with respect to threatened and endangered plant species. And part of that related to the relative urgent need for information given the newness of the ESA.

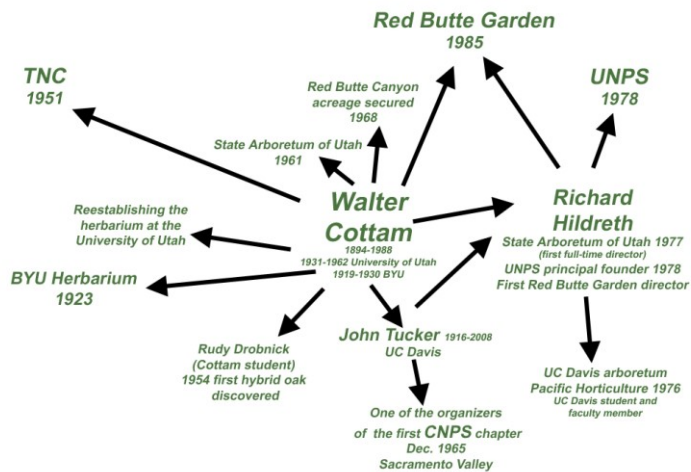
The UNPS rare plant committee met in 1979 and 1980 in preparing initial US Fish & Wildlife Service recommendations for the candidate program that then existed. These were typically meetings involving a few dozen individuals with the most knowledge about rare plant species in the state, although anyone who was interested could attend.

In November of 1981, there was a Rocky Mountain regional rare plant conference in Denver (four native plant societies were involved including UNPS). Drs. Stanley Welsh, Elizabeth Neese, Duane Atwood and also Dick Hildreth attended on behalf of UNPS.



UNPS awarding Walter P. Cottam with an honorary lifetime membership. May 4, 1979, photo by Duane Atwood.

COTTAM CONNECTIONS



Duane Atwood at the March 2005 Utah rare plant meeting at the Sugarhouse Garden Center in Salt Lake City. Photo by Tony Frates.

Then in December of 1981 there was a rare plant meeting held at BYU which I was very fortunate in being able to attend. It was referred to as "the annual" rare plant meeting. Dr. Duane Atwood was often the driving force behind organizing these meetings and making them happen. Sometimes they were held at BYU, sometimes Logan (I recall attending one at the Intermountain Herbarium at Utah State University circa 1982-84), sometimes in Salt Lake City, and for a few years in the late 1980's, in St. George. So throughout the 1980's and until 1992, these meetings continued providing shared knowledge and observations about rare plants in the state. After that date, Utah rare plant meetings then went on temporary hiatus (but for a while there were annual rare plant field trips during the summer instead). Roughly there were at least 15 rare plant/status review meetings which also sometimes included some presentations. Species listed or being considered for ESA often, as now, were often profiled and highlighted.

The newer era of rare plant meetings

After some conferences that Ben Franklin of the Utah Natural Heritage Program initiated sometime in the 1999-2001 timeframe when there was a need for more current information on the status of any number of species, in 2002 we held our first jointly sponsored conference with Red Butte Garden (RBG), and those meetings were subsequently all held in Salt Lake City at various locations, not always on the University of Utah campus, but most often, from 2002 to 2008. In 2009 we co-hosted a regional conference at the University of Utah, i.e. the Fifth Southwestern Rare and Endangered Plant Conference. It was a separate, multi-day event. Then from 2010 to 2014 our joint rare plant meetings with RBG as a critical partner/sponsor continued. Starting in 2015, the Garrett Herbarium (GH, herbarium code UT) became involved as we then started to hold the meetings in the Natural History Museum of Utah (driven in large part by the need for larger meeting space). In 2015, RBG was also a sponsor. In 2016 through 2018 the annual meetings continued with GH continuing as a sponsor and helping to play a critical role. The next

conference is scheduled for March 5, 2019 and will be the 5th year in a row involving GH as a co-sponsor.

In the "modern era" we have therefore co-hosted 17 consecutive presentation-style rare plant meetings which have often also been associated with a separate status review meeting. Combined with the 1978 to 1992 period, we've held (with critical help and support from our co-sponsors, particularly in the last 17 years), at least 32 rare plant meetings that botanists, agency personnel, and any interested members of the public have been able to attend.

Conclusion

It was a general heightened awareness of the importance and beauty of native plants (not the least of which was also the recognition of their value for horticultural purposes as planted naturally adapted to our landscapes) that led to the creation of western native plant societies. While the Endangered Species Act of 1973 may not have been the sole or pivotal reason for the formation of many western native plant societies, it very quickly became a prominent focus for all or most of them: it became a natural part of these mostly nascent native plant organizations to rally around and respond to the call for information leading to, in part, periodic rare plant meetings and the establishment of rare plant committees, and conservation activities focused on issues relating to rare plants in general including all aspects of their ecology.

The importance of the ESA cannot be overstated despite some of the misinformation that exists about it, especially with respect to native plant species. The recognition that ESA (including candidate) status brings to species leads to much higher awareness and attention, funding (and therefore research) including more in depth surveys and monitoring, land acquisition and conservation easements, and more. ESA listings for plant species do not force but rather encourage landowners to conserve increasingly shrinking natural open space habitat. They do not stop project proposals.

UNPS is proud to have been part of helping to gather information about the status of Utah rare plant species and to have helped provide a forum for disseminating that information through rare plant meetings along with the extensive work of our rare plant committee to rank the status of Utah rare plants, and also helping to encourage research for rare plants of Utah and the Intermountain West via our grants program, and attempting to educate the public via our various publications not the least of which has been our newsletter.



Walt wrote in 2008:

"Sego Lily (*Calochortus nuttallii*) is the state flower of Utah and has been the mascot of the Utah Native Plant Society since 1982. Kaye Thorne rendered this illustration for the Utah's Colorful Natives coloring book produced in 1981 by UNPS. The drawing was later used for the Sego Lily masthead. Kaye Thorne was the first editor of the Utah Native Plant Society Newsletter (1978-1980) and was active in Utah botany for decades. She passed away in April 2004."

Rolling Smokes and Chasing Hats Field Trips

by Robert Fitts

Albion basin is a favorite botanizing area. After one field trip, Liz Neese, Dave Wallace and I stayed looking for more plants. I had lost my copy of Flora of the Central Wasatch Front on a previous hike. We were looking at a plant and Liz asked if I had brought a copy of that book. I said no, but I did have a copy of Uinta Basin Flora. Liz is one of the authors of that book. I pulled it out of my pack. There was a hole worn through the front cover from many miles of hiking. Liz yelled "My Book, My Book! Someone's using my book!" Liz would go botanizing wearing a two piece bathing suit, which elicited comments from the male members on the trip to Washington County.

Lois Arnow, Ann Wyckoff, and Bev Albee are the authors of Flora of the Central Wasatch Front. Ann taught me to key out plants. After the second edition of the flora came out, Lois wanted to swap me for my original edition, which had some mistakes in it. I wouldn't do it because I was attached to the old one, which later I lost, but it was still one of the most important books in my life.

I was with Dave Wallace and Jo Stolhand on a field trip. My hat blew off and Dave quoted a rancher in Dugway "Don't hire cowboys that smoke or wear straw hats, one is always rolling a smoke, and the other is always chasing his hat." I was not happy about this but I still wear a straw hat outside. On another field trip my sunglasses were blown away over a cliff. I climbed around and down the cliff but never found them.

Stan Welsh. The first time I met Stan I was looking at *Pediocactus simpsonii* specimens to find locations for a surrogate to study rare *Pediocactus sileri*. Stan asked me what I was doing and he told me that my study was worthless. I responded that I felt that way sometimes too. In Montrose Colorado, I went to church and a lady asked me what I was doing. Well I was studying bees and pollination. I was down and out at the time. She then told me she had read a sci-fi book about a virus destroying all the bees in the world and there was a global famine. This was the uplift I needed to get going on pollination studies.

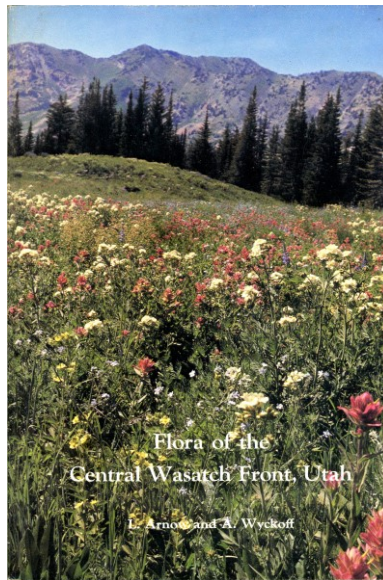
I was talking to Stan another time and I asked him about the saying above his door. *Nihil est Meliorum Quam Vita Diligentissima*. I said "Is that a real latin saying or did you make it up?" He said no! It was really found on a Roman stone inscription. Stan ordered "Translate it!" I said "nothing is greater than a life of diligence." He corrected me, "nothing is sweeter than a life of diligence." We laughed, I've gotten along well with Stan ever since.

The biology education teacher at BYU came into the Herbarium looking for Stan to teach one class about taxonomy for the students who would teach High School

Biology. He wasn't around and I said I would be happy to do this. A week later I did a presentation on making a punch card key. She loved it. So did the students. She asked what I was doing in the afternoon and I said I would go to the Herbarium. She said "go out and do something fun." I took her advice and went out botanizing. At Moark Junction there are some old gravel pits. I thought to myself...this looks like a good place for *Viola beckwithii*. I wandered around the area above the gravel pits and found a few *Viola* plants. This led to several fun field trips to the site and more *Viola beckwithii* being found along the front. *Viola beckwithii* had not been reported from Utah County since 1923. On one of the field trips Susan Garvin and I stayed

after everyone else had left for a long talk. Susan and I met pulling weeds at Rock Canyon with UNPS. I rode with her to Price Canyon Recreation Area for a field trip with her daughter Jessica and one of her friends. Price Canyon Recreation Area has been one of my favorite places to go for UNPS field trips. You can go on a short hike and see most of the conifer trees in Utah close together. Susan and I later got married after many more field trips together.

Great Basin National Park field trip was a spectacular visit and a hike through alpine to desert areas. I arrived a couple of days early with Jo Stolhand and spent the whole time botanizing and climbing the peaks. Another hike for Great Basin plants is the Crest of the Oquirrh Mountains. We found a nice patch of steer's-head on one trip. Jo Stolhand was excited to find this because she's a real fan of this plant and the fact that it might be pollinated underground before the flowers even emerge from the ground. Tatow Knob is a mountain in the House Range. Lots of Great Basin flowers were along the way to the peak. We never made it to the top, so that's for another field trip in the future.



Utah Native Plant Society 40th Anniversary Annual Meeting and New World Potluck

Saturday, October 27th, 2018 1:00 - 4:00 p.m., Provo Library, Bullock Room, 550 N. University Avenue, Provo, UT

The Utah Native Plant Society was formed in September of 1978 by a group of botanists, government agencies, and citizens spearheaded by director of Red Butte Garden Dick Hildreth, Dr. Stanley Welsh and Dr. Duane Atwood. This year marks its 40th Anniversary. There will be an interactive panel discussion reviewing the history and future of UNPS, with Dick Hildreth joining us via Skype from Tucson, Arizona. There will also be a very brief business meeting to vote on nominations of board members for the coming year.

A "New World Potluck" features foods that are native to the Americas and that celebrate the fall harvest, such as corn, squash, bread, pies, etc. Our host Utah Valley Chapter will provide the turkey and mashed potatoes. Please bring a dish to share for our fall feast and celebration. This event is free and open to the public.

The "New" UNPS Wildflower Poster

The UNPS Board of Directors took action when our supply of the popular *Utah Wildflowers* posters was running out. Now we have a sizeable inventory of high-quality posters, but it wasn't easy.

Mindy Wheeler went to the printer only to learn that we needed new digital artwork since the earlier analog-based material had become obsolete. The Board considered Mindy's findings and accepted the printer's offer to digitize and print our posters. Dave Wallace was assigned to take over the project, and, with the help of proofs provided by the artist, the printer was able to produce a great product. Future reprints should be easier and less costly now that everything is digital.

Except for a few details, the "new" poster is identical to the original 1988 version. We kept Pam Johnson's calligraphy and, of course, it still features 28 of our favorite Utah wildflowers. It's printed on heavy-weight paper as before, but the colors are slightly brighter and the ink is more fade-resistant. We made it $\frac{3}{4}$ inch taller to accommodate an additional line of text explaining concerns over scientific names that have changed over the years.

Dave enjoyed working on the poster reprinting effort, in part because he was involved with the original poster project in 1987-88. Back then, Jo Stolhand led the poster committee, UNPS members submitted names of their favorite flowers, Dave Gardner did the artwork and Paragon Press printed it. UNPS didn't have much money in those days so we covered the printing costs with a loan from the Nature Conservancy.

You may wish to give one as a gift, to enjoy for its artistic qualities, or to replace an old faded copy. At 22 inches wide and 34 inches tall, it fits nicely in a standard 2'x3' poster frame. It's a bargain, too. The UNPS member cost is \$10, the same as the original member price. Contact a UNPS Board Member or Chapter Officer if you want a copy, or get it online at www.unps.org (select the "store" option). You also may be able to find one for sale in a visitor center or museum.



© 1988, 2018 UTAH NATIVE PLANT SOCIETY
22" x 34" (55.9 x 86.4 cm) \$10.00
PRINTED BY THE NATURE CONSERVANCY

Utah Wildflowers
UTAH NATIVE PLANT SOCIETY
Preserve Utah's Native Flora

ARTIST - DESIGNER: DAVE WALLACE
CALLIGRAPHY: PAM JOHNSON
PRINTED BY PARAGON PRESS, 3601 LARK CIRCLE, ST. LOUIS, MO 63108

David Wallace ... reprinted from the Winter 2017 issue of Sego Lily

UNPS 40th Anniversary Celebration

by Bill King

UNPS celebrated its 40th anniversary (Sept. 1978 to Sept. 2018) at the Spruces Campground in Big Cottonwood Canyon near Salt Lake City. The Salt Lake Chapter was the host chapter. It all started shortly after 2 pm on Wednesday, September 12th, 2018 when Bill Gray led a fall botanical walk up Days Fork, looking for edible fruit and seed where they also ran across the striped coral root orchid, *Corallorhiza striata*.

Around 5 pm, hors d'oeuvres were served followed by a chicken and rib dinner accompanied by many other potluck dishes, as well as fruit and dessert.

Bill King gave a quick historical review of the Spruces Campground, built by the WPA, CCC and the Forest Service in the late 1930's and dedicated in 1939.

Bill Gray gave a talk originally put together and researched by Wayne Padgett and associates on the Wasatch tree nursery, 1905 to 1920, which was a predecessor to the Spruces Campground. Wayne had a conflict and could not be with us on Wednesday night but he was the following morning. Bill Gray gave the slide show and talk on a wonderfully clear pop-up screen and a slide projector powered by Bill's van battery. Everything went very well but sitting among the trees while watching the show about the birth of the trees more than a 100 years earlier did seem a bit surrealistic but heart warming and wonderful.

Along with renting the campground for the meeting and celebration came the opportunity to spend the night in the campground at no additional cost and some of those in attendance did so, especially those from out of the



area. In the morning Wayne Padgett showed up and took us around the campground on a tour of the trees, many of which dated back to the Wasatch Nursery. Of particular interest were the deciduous larch conifers which are not native to Utah.

It was a fun-filled celebration of nearly 24 hours for 25 people from 4 chapters including the Cache, Salt Lake, Utah Valley and Canyonlands chapters. A few members of Meet- Up.org also joined us for the walk. Many thanks for all of those who brought the food and to Bill Gray, Wayne Padgett and Cathy King for organizing the event.

Quiet, cool, invigorating and beautiful fall color. Great Celebration among the trees !



Spruces

by Bill King

The Spruces Campground in Big Cottonwood Canyon was the site of the UNPS 40th Anniversary Celebration. The Spruces has a very interesting history. In 1900, after years of mining, ranching and camping, as well as wildfires, the canyon had become denuded of trees and in need of reforestation to help protect the watershed and to later provide a source of lumber. In 1905 the US Forest Service built a 6 acre tree nursery where the campground is now and much of the adjacent area around the nursery was declared a Forest Reserve. The Wasatch Nursery (aka the Big Cottonwood Nursery) grew seedlings which were planted out in 2-3 years in the forest reserve as well as in other forest areas across the west. At one point, nearly 5 million trees were being grown at the nursery, making it one of the largest tree nurseries in the Forest Service. Engelmann spruce, Douglas fir, western yellow pine, Utah red pine and

various larch were grown from seed. Experiments were conducted on the best way to grow the trees and plant them out.

In 1920 funds were not appropriated by Congress and the nursery was shut down. The Forest Service decided to convert the nursery into a campground. Much effort had been expended to develop a water system for the nursery and that could now be utilized by a campground. The Forest Service sought local partners and the Salt Lake Chamber of Commerce and later the Rotary joined in and the Utah Outdoor Camp was developed including fifty, four person tents and six cabins.

In 1935 plans were made to improve the Utah Outdoor Camp with the help of Depression-era work relief government programs: the Civilian Conservation Corp (CCC) and the Works Progress Administration (WPA). On July 23, 1939 the name of the campground was changed and dedicated as the Spruces Campground and the Forest Service took over management of the camp. Today, some 80 years later, the Spruces Campground is still a great public place for camping or a celebration.

wonka's Botany Flashback

The Salt Lake Tribune, November 30, 1905

TO PLANT TREES ON SALT LAKE RESERVE

New Scheme Is Being Employed by By Government to Protect Watershed

"The plans that we make," said he [Mr. Fetherhoff], "have been inspected and approved by Gifford Pinchot, chief of the forest

service, and Senator Smoot. The work of the planting will be begun just as soon as the plans can be reared. The ground has already been cleared and a lath house will be erected in which the trees will be kept for one year. After that they will be set out in nursery rows for two years at the end of which time they will be transplanted to the mountain slopes. The nursery will be established near Mill Dee Flat, in the canyon."

UNPS Rare Plant Task Force Meeting

will be held in the Monte L. Bean Life Science Museum at BYU.

The meeting room will be two combined rooms, room 2015 and 2021 on the main floor in the southeast corner.

The meeting is open to all. Persons interested in ranking a plant of interest may contact Robert Fitts for data from the Utah Natural Heritage Program (801-518-3550 robertdrake.fitts@aggiemail.usu.edu). This data set does not have exact points, but is close enough for ranking purposes. We do not release information on Indian trust lands or National Parks.

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.

Susan Sims is our UNPS Membership Committee. You may direct any questions about and updates to your information to Susan at: membership@unps.org

WANTED: Membership Person

UNPS is looking for a **volunteer membership assistant** to keep membership records.

Some data-base entry helpful, but will train. Contact Susan Sims, shsims@mac.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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Vice President: Robert Fitts (Utah Co.)

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Jonathan Barth (Salt Lake Co.)

Adrienne Pilmanis (Salt Lake Co.)

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Horticulture: Kipp Lee

Invasive Species:

David Wallace & Jonathan Barth

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Website/Internet: Tony Frates

Rare Plant List/Rare Plants: Robert Fitts

Small UNPS Grants: Raven Reitstetter & Adrienne Pilmanis

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Escalante:

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Manzanita:

Mountain:

Salt Lake: Cathy King

Southwestern/Bearclaw Poppy:

Utah Valley: Susan Sims

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

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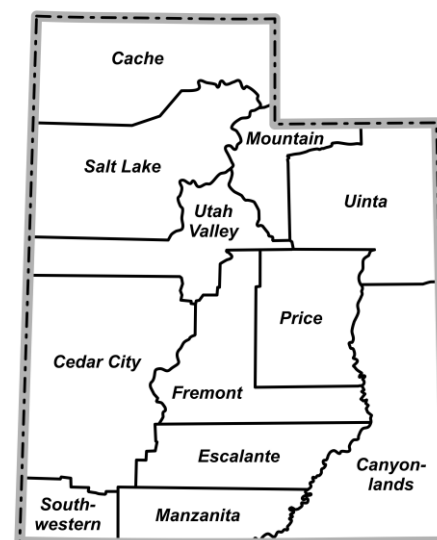
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The *Sego Lily* is a quarterly publication of the Utah Native Plant Society, a 501 (c)(3) not-for-profit organization dedicated to conserving and promoting stewardship of our native plants.

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