

# Sego Lily

*Newsletter of the Utah Native Plant Society*

November 2011 (volume 34 number 6)



## *Marcus E. Jones (1852-1934)*

*By William H. King*

Marcus (Mark) Jones was born in Jefferson, Ohio in 1852 but later moved with his parents to a farm in Iowa. He graduated from what is now called Grinnell College in Iowa in 1875 where he subsequently taught Latin and botany for four years and got his Masters degree. During the summers, he collected plant specimens from Iowa, Colorado, and in 1879, from Utah. He sent many of these specimens to Asa Gray at Harvard or George Engelmann in Missouri for determination. Duplicate sets were sold around the world. On February 18, 1880, he married Anna [continued on page 4]

*Above: "The entrance to Zion". Marcus Jones's wagon at Springdale, probably May 14, 1894. Note: all of the Jones photos in the electronic version of this issue can be magnified up to four times using typical pdf viewers.*

## Utah Native Plant Society



# Utah Native Plant Society

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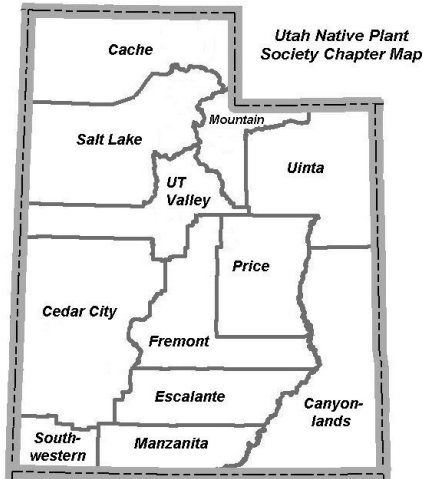
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remnant granaries. On the way out, we were treated to a second county record for the viney and sticky Spreading four -o' clock (*Mirabilis oxybaphoides*) in full flower. Two records in one afternoon—not a bad day's fun. - *W. Fertig*



## Chapter News

**Escalante:** The chapter's annual holiday party will be the second week of December at the Slot Canyons Inn. For more information, contact Robert (826-4297).

**Manzanita (Kane County):** For our September outing, an intrepid band of members hiked Kanab Creek Canyon at the Best Friends Animal Sanctuary to explore fall wildflowers and arch-

aeology. Among the highlights of the trip was finding wild hops (*Humulus lupulus* var. *neomexicanus*) draping juniper and cottonwoods at the head of a small side canyon (photo at right). This is apparently the first record of hops growing wild in Kane County. After thrashing through the brush (and avoiding some poison ivy), we reached an alcove with rock art and

## Bulletin Board

**UNPS Annual Meeting, 5 November 2011:** The Salt Lake Chapter will be hosting the annual Utah Native Plant Society members meeting and potluck on Saturday, November 5 at Red Butte Garden from 1-5 PM. Past Society President Bill Gray will address the group about his project to catalogue and relocate photo points in Utah and the southwest taken by pioneer botanist and noted curmudgeon Marcus E. Jones. Dr. Gray's work has been funded, in part, through a small grant from UNPS. The meeting will also include the election of new society officers and board members and is an excellent opportunity to socialize with kindred native plant lovers.

**2012 Rare plant meeting:** Red Butte Garden and the Utah Native Plant Society will again be sponsoring the annual rare plant meeting, planned for March 6 at Red Butte Garden. Look for more information on submitting abstracts or enrolling in the January *Sego Lily*.

**Revised Utah BLM Sensitive Plant List:** In April, the BLM Utah State Office issued an updated Sensitive Plant Species List for Utah containing 109 species. This new list supersedes the previous state Sensitive list, issued in August 2002. The 2011 list contains 29 species that were not on the 2002 roster, including several that were formerly listed or candidates for listing under the US Endangered Species Act (such as *Astragalus equisolensis*, *Erigeron maguirei*, *Penstemon grahamii*, and *P. scariosus* var. *albifluvis*) and others that are either new to science (*Camissonia bolanderi* and *Frasera ackermaniae*), or had been thought to be less threatened in the past. Another 19 species formerly listed as BLM Sensitive have been dropped from the 2011 list, including *Aquilegia loriae*, *Astragalus uncialis*, *Iris pariensis*, *Lomatium graveolens* var. *clarkii*, and *Penstemon ammophilus*. Species that are already listed as Threatened or Endangered under the US Endangered Species Act are not included on the BLM Sensitive list. The 2011 and 2002 lists are both posted on the UNPS webpage (Rare Plants tab) for reference. To qualify for Sensitive status, a species must be native to the state, found on BLM-managed lands, is undergoing or predicted to undergo a significant decline placing it at risk of extirpation, or is dependent on specialized or unique habitats on BLM lands that are threatened with alteration.

**Salt Lake Chapter:** Our September meeting was the annual 'UFO night', which was highly successful. Fourteen members had submitted about 60 photos of Unknown Flowering Objects from their travels around the state, and we had a great time figuring out what they were. As always, there were some wonderful pictures of highly unusual, common but beautiful, and downright puzzling plants.

In October, Bill King gave the first installment of a two part set on the great botanical explorer Marcus E. Jones, who botanized Utah and other western states for over four decades from 1880. He amassed a huge number of specimens, naming hundreds of new species and varieties. In addition to botany he was a geologist, mining engineer and general 'promoter'. Bill painted a picture of a very complex man who was dedicated to his goals, but opinionated and difficult to get along with. Of course the same was true of a number of other scientist-explorers of the late 19th Century as well.

Jones photographed extensively on his travels, and left a large archive of old photos. I have been working to

digitize a collection of his glass slides and negatives at Rancho Santa Ana Botanic Garden in California. At our November meeting, I will talk about this aspect of Jones's work, and compare some of the old photos with contemporary shots of the same places. The meeting will be held on Saturday, November 8th at Red Butte Garden from 1-5 PM.

In December, our meeting will be at the regular time and place: 7 PM, Wednesday, December 7th at REI. Richard Jonas has provided great photos for our UFO night for many years. On this occasion he has the floor to himself as he introduces us to some of his favorite "Utah Wildflower Hotspots" - places he visits regularly to track down their special plants. He will also talk about how he gets such wonderful pictures using a relatively simple camera setup. - *Bill Gray*

**Get Well Soon:** Best wishes to UNPS stalwart and cactophile Dorde Woodruff, currently recuperating from a nasty spill.

**Unidentified Flowering Object:** The September UFO was a bird cage

evening-primrose (*Oenothera deltoidea*) in late fruit (showing the "bird cage" of coiled fruiting capsules). Although photographed by Bill King in southern Nevada, this species is also found in the desert areas of SW Utah and is one of the earlier flowering species in the spring. This month's UFO (below) is a 5 foot tall, fall-flowering herb from the Shivwits Indian Reservation outside of St. George. Any guesses?



## Marcus E. Jones (1852-1934)

[continued from page 1] Elizabeth Richardson, another teacher at Grinnell. They moved their residence to Salt Lake City. Upon arriving in Salt Lake, they immediately set out for St. George and began collecting plants in March.

In the spring of 1882, Marcus was collecting plants with 3 other botanists, including Charles C. Parry, near Ensenada, Mexico. The group came upon a new rose which is now called *Rosa minutifolia*. Marcus thought that he had spotted the rose first. Parry left the group early and headed to San Diego and subsequently published the description of the rose first. Marcus accused Parry of stealing his rose. Parry retaliated and had Marcus banned from publishing in several of the top botanical journals. This created a great life-long animosity between the two. Subsequently, Marcus was more careful whom he collected with, choosing mainly to collect with personal friends, students, relatives or just by himself.

Marcus never had a full-time permanent job in Utah, but made his living from collecting and selling plant specimens and teaching. He was an occasional mining consultant and also made plant books for souvenirs, which he sold to a distributor. Marcus was also a writer, photographer and publisher, printing and publishing his own works, including his own botanical journal (*Contributions to Western Botany*). He is also well known for his monograph on the genus *Astragalus*. This treatise was to have been just one part of a Flora of the Great Plateau, but was never completed. His wife Anna supported his activities first as a school teacher then by running a boarding house and taking in sewing while he wandered the West in search of plants. Marcus, Anna and their three children lived for many years in central Salt Lake City. He separated from her sometime after 1912 and she passed away on September 10, 1916.

A voracious plant collector, Marcus spent almost all of his time and effort



collecting plants in the Intermountain area, a territory he guarded jealously from other botanists with his sharp tongue and pen. He also collected throughout much of the West and in Mexico. In 1894, he collected 50,000 specimens as a special field agent in southern Utah for the United States Department of Agriculture. In his lifetime, he described over 700 taxa of plants, most of which he believed were new to science. The majority of these names remain in use today.

Marcus had many other interests: He recorded changes in the level of the Great Salt Lake and he wrote articles about it and other water issues. He sailed the Great Salt Lake in his catamaran boat. He also wrote tourist guide booklets about Salt Lake and Utah. He promoted the Deep Creek mining district in another booklet. He was an expert witness in court cases, testifying about the negative effects of smelter smoke. He was a life-long member of the Congregational Church and was a preacher himself.

In 1923, he sold his personal herbarium collection, consisting of more than 20,000 mounted speci-

*Above: Escarpment milketch (Astragalus striatiflorus) is one of over 50 Astragalus species or varieties named by Marcus E. Jones from Utah. The type of A. striatiflorus was purportedly taken from Springdale, Utah in the fall of 1894. Welsh has questioned whether the type actually came from Washington County in the vicinity of the future Zion National Park, or rather from western Kane County, where the plant is still found today. In any event, this species has not been recorded from the Springdale area since. Photo by W. Fertig.*

men sheets (and many more unmounted), to Pomona College in California for \$25,000 (this collection now resides at Santa Ana Botanic Gardens in Claremont, California). He moved with his herbarium collection to southern California where he spent many more years collecting. He died in a car accident in his Model T in 1934 in San Bernardino while returning from a plant collecting trip.

Marcus Jones undoubtedly made one of the most extensive collections of Utah plants ever. For more information on his collections see Lee W. Lenz's 1986 biography of Jones entitled "*Marcus E. Jones, Western Geologist, Mining Engineer & Botanist.*"

# Through the Lens of Marcus Jones

By William R. Gray

It should be clear from Bill King's article that Marcus Jones was quite a remarkable man, though not a god, with an enormous passion for the subjects that really caught his attention. He diversified in order to make a living from the various subjects he loved.

One of his indulgences was photography, at a time when cameras were becoming more practical for use in the field. As was typical he went wholeheartedly into this endeavor, starting with his first camera in 1884. He owned a series, 'splurging' on a new model when some significant journey was being funded by a geological or mining enterprise. Not only that, he set up his own darkroom, sensitized his own photographic paper, did his own printing, etc. He also experimented with etching his own plates for use in his printing equipment. Perhaps he became the poorer for it financially – but we benefit immensely from his indulgence in other ways.

Most frequently his subjects were scenic or geological, rather than botanical – why waste money on an expensive glass plate when you can collect the plant itself! This article is a preliminary report on my work with a collection of Jones's glass slides that was rediscovered last year.

Early in 2010 Bill King and Tony Frates were in contact with Harvey Brenneise, then the librarian at Rancho Santa Ana Botanic Garden (RSA) in Claremont, California. This is where Jones's major collections ended up after his move to Pomona College in 1923. Brenneise mentioned that they had discovered a cache of his old photographic slides and negatives in the basement, perhaps a thousand in all! It immediately struck me that this find could give us a glimpse into the West of a hundred years ago, as seen through a very special pair of eyes.

RSA felt that it would take major time and effort to obtain funds to scan and digitize the collection, so I offered to develop rapid photographic methods to convert the images into digital format. UNPS awarded me a small grant, I built a pair of special purpose light boxes, and just after Thanksgiving 2010 we made our first trip to RSA – the beginnings of an ongoing detective story. 'We' in this context includes my wife Sylvia who came to play an indispensable part in the project. Initially somewhat skeptical, being a birder rather than a botanist, she became increasingly fascinated by Jones's extraordinary life. Preceding our trip Irene Holiman at RSA had assembled a team of volunteers who began the process of cleaning and cataloguing the slides.

## **Nature of the Collection**

There were two main categories: 5x3 inch glass projection slides, and various glass negatives, mostly about 7x5 or 8x5 inches. Almost, but not quite all were in black and white. They had been stored in wooden boxes and were quite dirty after 80 years or so. Some of the negatives were in very poor shape, having been directly exposed to the elements. The slides, however, consisted of two pieces of glass taped together with the image between. We don't yet know whether the emulsion is directly on one of the glass pieces or on a celluloid film sandwiched between the two. I suspect the latter, though either way the emulsion has been better protected. On the downside, once the sandwich is made you may not be sure which way round the slide should be viewed!

We decided to start work on the slides and leave the negatives for later. An unexpected bonus was the fact that they were all numbered

and labeled by Jones, with the exception of a few that had lost their labels. There was no apparent system to the numbering, except for sporadic groupings of related slides, and only rarely were they dated. One possibility is that Jones made most of them after moving to Pomona in 1923, and that they were used to illustrate his lectures there. His sources were mainly his own photos spanning about 30 years, but they were liberally supplemented by maps and by photos taken from books and magazines. Pictures of Sulu warriors from the Philippines are intermingled with those of glaciers in Switzerland - and Jones hadn't visited either place. His numbers go as high as 695, of which we have so far accounted for 601, or roughly 85%.

## **Capturing the Images**

Top quality scanners definitely give top quality results for making digital images of flat objects such as photos. They do, however, tend to be labor and time intensive. My priority was to get high quality images as efficiently as possible, so as to make best use of my limited time at RSA. To do this I constructed two simple viewing boxes, both using diffuse light from a window, reflected off a sheet of artist's foam-board to provide an even background. More details of the photography will be made available on the UNPS website, but a general idea is included here.

The first "box" consisted of two pieces of foam-board: the reflector and another piece with a hole cut out to act as a frame for the slide. This enabled us to simultaneously photograph the surface with its label, and the image illuminated from behind. By doing so we created a robust link between the image and its label, plus correct viewing orientation. A simple point and shoot camera was used for this essentially cataloguing photo.

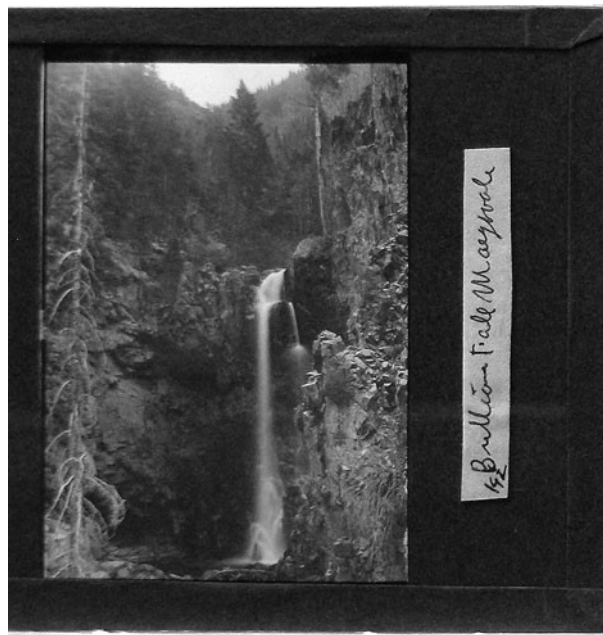
The second box was made to provide a framework in which the only light getting to the camera came through the slide from the reflector, ensuring the cleanest image. For this job I used a 12 megapixel camera rigidly mounted with the box. It was directly linked to and controlled by a laptop computer: at all times what the camera was seeing was displayed on the screen. For each slide I took three different exposures: normal, underexposed, and overexposed, using both jpeg and the camera's 'raw' setting in which no information gets thrown away. All the images went directly to the laptop's hard drive for future processing.

### ***The Digital Images***

Back in Salt Lake City I started work on a database to keep track of the images and various information such as the RSA volunteers' transcription of the labels. The handwritten labels were often almost undecipherable, especially for people unfamiliar with Utah geography. Thus 'Leather Gate' eventually morphed into 'Castle Gate' – don't laugh until you see the handwriting! Magnifying the label's digital image proved decisive in many cases, but others still remain inscrutable. Additional information that is being pieced together for each slide includes State, County, location, GPS coordinates, date, plant identity when appropriate, etc. Eventually it is hoped to make this information available to the public as an interactive database that they can search – and send us comments on photo locations.

Image quality is quite variable. The immediate impression is one of being washed out: not crisp blacks through whites, but dark gray through light gray. This reflects a more limited tonal range in the originals, probably with some deterioration during storage. They are definitely not something that improves with age. We can restore some dynamic range by combining the multiple exposures when images are especially interesting, but that is quite time consuming.

At full resolution on the computer screen the images are magnified to about 60 x 40 inches. At this scale



*Left: "Bullion Fall Marysvale". A typical slide made from one of Jones's original photographs with his handwritten label. This is our low resolution photo combining transmitted and reflected light. It is printed actual size (3" high), but cropped on the left. Jones had it flipped horizontally in the slide. See text for more discussion.*

some interesting things emerged. Several times Jones's horse and buggy materialized from an obscure blob. Another time the old bridge over the Grand (Colorado) River at Moab appeared out of the mist above the river.

Quite unexpectedly it turned out that most of Jones's slides of individual plants, of which there are few anyway, are made from photographs printed in books or magazines! This is clear from the printing 'screens' which show as a regular grid. The same is true of a few travel photos that one would really expect to have been taken by him. Jones did much of his own printing. Perhaps in the 1920s at Pomona it was simpler for him to re-photograph from printed sources, his own or otherwise, rather than hunt down the negatives. Until we can track more of the original sources they will remain unclear as to who made the photos.

### ***Slides from Jones Originals***

The slides represent only a sample of the photos taken by Jones – as mentioned before they may have been made mainly to illustrate lectures at Pomona, so are not representative of his whole output. A preliminary accounting of the approximately 600 slides that we have from him can now

be made, though more work is needed, and a few more slides are still surfacing. About 500 are based on his original photos in the field, two-thirds of which were from Utah. Small numbers from Nevada, Colorado, southern Idaho and northern Arizona bring the total for the Intermountain region to roughly 360. The second large grouping comprises Montana (90), Washington (22) and northern Idaho: Jones made several trips north in the years before 1910 to study the flora of Flathead Lake and what was to become Glacier National Park, and to feed his passion for glaciology. In addition there were much smaller numbers of slides from other areas: Iowa where he had grown up, California where he retired, and Washington, DC where he worked on his specimens at the U.S. National Herbarium in 1895.

Overwhelmingly the slides are of places interesting for their scenery, mining or geology, and botany as such is peripheral. Still, many of them do show habitats as they were a hundred years ago, and I have begun the process of trying to trace Jones's original locations to retake the photos as closely as possible. Some efforts have been rewarded with very close fits, while others show places that have disappeared or been changed beyond recognition. The remainder of this article is devoted to sampling a

few of the more noteworthy before and after pairs, and putting them in the context of his travels.

**1894: Jones's Big Year**

In 1894 Jones was hired as a special agent of the US Department of Agriculture to survey plants in the general area of the Colorado River. It was a very big deal and enabled him to travel widely in Utah, plus a little in Nevada and Arizona. He carried a camera which was bought in 1891 at the start of a mining survey that he undertook to western Utah and Nevada. It used large glass negatives approximately 8x5 inches and was his main one until about 1905. The earlier slide shown of Bullion Falls near Marysvale was taken with this camera. It provided our first certain identification of a photo from this trip: we also found the original negative with '1894' written directly on the glass. He used the same image in his book *Utah*, published in 1902. The negative and the book have the correct horizontal orientation, while the slide is reversed.

At the time Marysvale was a busy town serving the productive mines up Bullion Canyon. Jones spent over two weeks here, first from May 30 to June 6, and again from August 21 to September 2. The mining camps afforded him lodging and access to the high Tushar Mountains. This photo was likely taken on the summer trip: aspen are in leaf above 8000 feet, there is no snow visible, and the falls are relatively slow flowing. His journal for August 24 records that he "Botanized around camp and especially on the cliffs at the falls." We were unable to approach the falls from the base at the end of June 2011, because the water was much too high.

For the big trip Jones outfitted a horse and buggy and hired a young man, Hugh Webb, as driver and general 'roustabout' (at least for the first part). Starting in mid March Webb went ahead, but got stuck in a blizzard at Holden, north of Fillmore. Jones followed by train and met him there. It took them almost another 2 weeks to travel from Holden to St. George under very difficult condi-



*Above: "St. George from the South" Photos were taken from Bloomington Hills, next to the present Interstate 15 (Jones, 4/27/1894; Gray, 5/11/2011).*

tions. Only then did he start botanizing, with a visit to the areas south and west of St. George, to which they returned on April 24. He was very familiar with the territory as he spent about 6 months there when first moving to Utah in 1880.

On April 27 they went south to the mouth of the Santa Clara River. It was there that Jones took the above photograph of St. George. Satellite imagery from Google Earth enabled me to locate his viewpoint

In the Bloomington Hills. Visiting there in May of 2011 I climbed a knoll next to the freeway and took the companion photo.

St. George had been settled in 1861. The LDS temple, clearly visible dead center in Jones's photo, was completed in 1877. Much of the land was swampy, as is apparent in Jones's photo, and had to be stabilized before construction. Main Street runs diagonally in the left foreground, while the Santa Clara River flows from left to



Above: "Capitol Wash" Arrows at base of Jones's photo indicate the Dwarf Mountain Mahogany (*Cercocarpus intricatus*) discussed in the text and the horse and wagon heading up-canyon into the narrows (Jones, 7/31/1894; Gray, 5/25/2011).

right at the foot of the knoll. A new freeway bridge is under construction in my photo: the picture was taken from a point slightly forward of Jones's, to avoid including any of the giant billboard under which I was standing.

Apart from extensive urbanization the photo shows a dramatic change on the knoll itself. A monoculture of Red Brome (*Bromus rubens*) has replaced what seems to have already become threadbare grazing land by 1894. Today's vegetation has no more nutrition, but far greater fire potential.

On May 1 Jones set out on a long loop that would take him to Cedar City and back, east to Zion, south to Pipe Spring in Arizona, then back to Salt Lake City by way of Marysvale. He took many pictures along the way, and collected many thousands of plant specimens.

The cover photo is a gem from this part of the trip, showing his wagon at the entrance to Zion in Springdale near the beginning of the loop. Although I was able to locate his photo point fairly accurately, and duplicate the skyline, the foreground has become cluttered by

development on the right and shrubs on the left. Overall the photos from Zion suggest that vegetation is now richer in the main canyon bottom, probably reflecting a lower local pressure from agriculture rather than any significant natural change. My best estimate for the date of this photograph is the afternoon of May 14, 1894.

Jones's stay in Salt Lake was very brief, merely long enough to pick up supplies, and he was back on the road. This time he was starting on a big loop to the high Henry Mountains in southeast Utah. It was now July and August, and they were heading by horse and buggy through Utah's mid-summer heat. Many place names have changed since then, but his route is clear: he traveled what is now US 89 to Salina, then across by way of Loa, Thurber (Bicknell), Junction (Fruita), Pleasant Creek (Notom), and Blue Valley (later Giles, now a ghost town west of Hanksville). At Caineville, close to Blue Valley, Jones collected the type of *Cleomella cornuta* (Rocky Mountain Stinkweed). It is now included in *Cleomella palmeriana* - which Jones had also been the first to describe. This plant was blooming there in May this year.

In those days the road through Capitol Reef went through Capitol Wash, and Jones took some notable photos as he traveled through in both directions. Sylvia and I spent several days there in May 2011. It was difficult finding some of his locations until we realized that Jones's left-right orientations were more or less random for that part of the trip. We ourselves probably looked a bit strange, walking through the gorgeous canyon scenery with our eyes glued to the printed photos! Very little has changed in the past 117 years, except for some of the gravel bars and their shrubbery. Though minor, these changes made it impossible to get exact duplicates of some of the photos. As with Zion, the canyon vegetation appears on the whole to be denser, including places where there has probably never been heavy impact from humans.

Our most revealing picture from Capitol Wash is one taken while Jones



was on his return journey, coming through in late morning from Notom on July 31, 1894. Once we had figured out the correct orientation we found an excellent fit as shown in the preceding photo. Later, while fading between old and new images on the computer I noticed a shrub in the foreground that seemed not to shift position (left arrow in photo on preceding page). Returning the next day we located a vigorous Dwarf Mountain Mahogany (*Cercocarpus intricatus*) that could well be 150-200 years old! Inside a dense tangle of living branches were others that may be the originals seen in the old photo.

A number of other shrubs on the right side of the picture are also candidates for having been established by the time of Jones's visit. Clearly visible in the wash in the original (right arrow in photo) is the horse and buggy heading up-canyon. Use higher magnification to see it here.

On his outward journey through the wash on July 19 Jones collected the type specimen of Poison Milkweed (*Asclepias labrifloris*); it was blooming there for us on May 23.

One thing that Jones seems not to have done: add his name to the historic "Pioneer Register". This is a sandstone face in Capitol Wash where others have left their names immortalized in paint, scratches and chips, or outlined by bullet holes. He probably felt far too dignified for such antics.

On his way back to Salt Lake Jones spent almost two weeks botanizing around Fish Lake. The high country must have felt wonderful following his blistering desert journey.

After just two nights at home he was off again, this time heading towards the north rim of the Grand Canyon. En route he made his second visit to Marysvale and the Tushar Mountains, where he photographed Bullion Falls.

When he finally returned home on October 15 he had traveled over 2000 miles in the wagon, plus another thousand by train. At a rough estimate he collected about 50,000 specimens including many duplicates. He worked to identify and catalog these over the winter and spring at the National Herbarium in Washington, DC.

Overall it was an amazing journey, and we are lucky to have some of his original photographs preserved.

### Other Journeys

There are far too many journeys and slides to describe in detail, but I will end with a couple from the Moab area of eastern Utah. Jones visited Moab several times from 1913, and took many photographs. Among these were some early attempts at color photography.

Sadly, at least for his slides, the emulsion proved to be unstable. Mostly all that remains of the color is a series of globs where it melted in the overheated projector of Jones's day. Perhaps the best preserved is one of the old Courthouse Stage Station near Moab, which was razed in the 1960s to make way for the Potash railroad. This is not to be confused with an earlier station whose ruins still stand to the north of Highway 191. The earlier one was abandoned because the route developed major problems with sand and mud. In those times it was

a full day's wagon journey for passengers to cover the 30 miles from the railroad at Crescent Junction to Moab, and they often took lunch at these halfway houses. Heavy freight wagons took 2 days and stayed overnight. Jones visited Moab several times, and this photo may have been taken in June 1913.

One thing that has made this project particularly enjoyable is the response we get when showing local people these old photographs. One incident stands out especially. I had used Google Earth to roughly locate a site at Moab, despite Jones having his directions backward. On the spot I was unable to get it right until an old-time resident came to see what I was doing. He pointed me up to the top of some cliffs and allowed me access through his property. The reward was a breathtaking viewpoint above the valley with vistas north and south - and an essentially perfect reproduction of Jones's photo. Obviously things have changed a lot because of urban development, which continues apace.



Above: "Courthouse Wash Station" About 1913. An early attempt at color partly melted in the projector. The station was located near Moab, but razed in the 1960s



Above: "Moab, Utah, looking northeast" About 1913. In fact Jones was looking south from a viewpoint above the north end of town. The major road visible in the modern photo is Main Street; 100 West is on its right. Elks Lodge is at bottom left, with my 'wagon' in the parking lot.

**Acknowledgements:** It is a real pleasure to acknowledge the help of many people who assisted in this project. Bill King, Tony Frates, and Harvey Brenneise first got me involved; UNPS provided a grant to get the project underway; Irene Holiman at RSA organized a team of volunteers, including Kathleen and Jim Ritchie, who provided us with welcome hospitality. I especially thank my wife Sylvia who assisted in many phases of the work.

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- Jones, M. E. , 1894, Diary and Field Notes, in Lenz, 1986.  
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 Lenz, L. W., 1986, Marcus E. Jones. Rancho Santa Ana Botanic Garden, CA.

*Utah Plant Species Named by Marcus E. Jones*

The following list includes the species and varieties named by Marcus E. Jones that are still recognized in the flora of Utah. Annotations include common names, type locality, and date first collected or published. All types were collected by Jones and all localities are from Utah unless indicated otherwise.

Apiaceae (parsleys)

- Cymopterus basalticus* (Shadscale spring-parsley) Wah Wah Mts, Beaver Co. (1906)  
*Cymopterus coulteri* (Two-leaf spring parsley) Juab, Juab Co. (1880)  
*Cymopterus duchesnensis* (Duchesne spring-parsley) Myton, Duchesne Co. (1908)  
*Cymopterus ibapensis* (Ibaph spring-parsley) Deep Creek Valley, Tooele Co. (1891)  
*Cymopterus lapidosus* (Echo spring-parsley) Echo, Summit Co. (1890)  
*Cymopterus purpureus* var. *rosei* (Rose's spring-parsley) Richfield, Sevier, Co. (1899)  
*Cymopterus terebinthinus* var. *petraeus* (Rock spring-parsley) Pali-sade, NV. (1882)  
*Lomatium grayi* var. *depauperatum* (Depauperate lomatium) Dugway, Tooele Co. (1891)  
*Lomatium juniperinum* (Juniper lom-atium) Coalville Summit Co. (1889)

Asclepiadaceae (milkweeds)

- Asclepias labriformis* (Circle Cliffs milkweed) Capitol Wash, Wayne Co. (1894)

Asteraceae (sunflowers)

- Aster wasatchensis* var. *wasatchensis* (Markagunt aster). Tate Mine near Marysvale, Piute Co. (1894)  
*Chrysothamnus albidus* (White rabbitbrush) Wells, NV (1882)  
*Chrysothamnus nauseosus* var. *glareosus* (Marysvale rabbitbrush) Marysvale, Piute Co. (1891)  
*Chrysothamnus nauseosus* var. *turbinatus* (Dune rabbitbrush) Canaan Ranch, Kane Co. (1894)  
*Cirsium calcareum* (Caineville thistle) Henry Mts, Garfield Co. (1894)  
*Cirsium clavatum* (Fish Lake thistle) Fish Lake, Sevier Co. (1894)

*Utah Plant Species Named by  
Marcus E. Jones, continued*

*Encelia frutescens* var. *resinosa* (Bush encelia) Little Colorado River, AZ. (1890).

*Erigeron nauseosus* (Marysvale daisy) Marysvale, Piute Co. (1894)

*Haplopappus scopulorum* (Spindly goldenbush) near Cedar City, Iron Co. (1894)

*Parthenium ligulatum* (Low feverfew). 10 miles S of Theodore, Duchesne Co. (1908)

*Perityle tenella* (Dixie rock-daisy). Springdale. Washington Co. (1894)

*Platyschukhria integrifolia* var. *desertorum* (Desert bahia) Cisco, Grand Co. (1890)

*Townsendia mensana* (Plateau townsendia). Theodore, Duchesne Co. (1908)

*Townsendia montana* (Mountain townsendia) Alta, Salt Lake Co. (1879)

*Townsendia strigosa* var. *prolixa* (Strigose townsendia) Chepeta Well, Duchesne Co. (1908)

*Viguiera longifolia* var. *annua* (Southern goldeneye) Named by Jones in 1895, lectotype collected by Marsh in New Mexico.

*Xylorhiza venusta* (Cisco woodyaster) Cisco, Grand Co. (1890)

Boraginaceae (borages)

*Cryptantha decipiens* (Beguiling cryptanth) Yucca, AZ (1894)

*Cryptantha mensana* (Carbon cryptanth) Emery, Emery Co (1894)

*Cryptantha virginensis* (Virgin River cryptanth) La Verkin, Washington Co. (1894)

Brassicaceae (mustards)

*Arabis pulchra* var. *gracilis* (Muncie rockcross) Argus Mts, CA (1897)

*Arabis pulchra* var. *pallens* (Desert rockcross) Westwater, Grand Co. (1891)

*Caulanthus crassicaulis* var. *glaber* (Smooth spindlestem) Sink Valley, Kane Co. (1890)

*Caulanthus crassicaulis* var. *major* (Slender wild cabbage) Henry Mts, Garfield Co (1894)

*Thelypodopsis elegans* (Elegant thelypod) Westwater, Grand Co. (1891)



*Jonesiana: Utah Species Named By and For  
Marcus E. Jones*

By Walter Fertig

Love him or hate him—and most of his contemporaries tended to the latter, Marcus E. Jones was unmatched in his knowledge of the flora of Western North America. This knowledge was earned through extensive travel by horse-drawn wagon, train, and automobile. For 55 years Jones traversed the West, from Montana to Mexico and Iowa to California, collecting several hundred thousand specimens along the way.\* For Jones, collecting plants was a source of income (he sold duplicate sets to museums, universities, and private collectors) and to escape some of his own personal demons by trading civilization for the wilderness. Plagued throughout life by severe headaches and emotional scars from a strict, fundamentalist upbringing, Jones seemed to find his only joy in botanical discovery. Interacting with other people was not his strong suit.

\* The exact number of collections Jones made is not known due to his peculiar numbering system. Rather than provide a unique number per specimen, Jones often used a number to indicate the locality, followed by letters for each unique species. In later years he stopped numbering his collections altogether (thus the high percentage of 's.n.' or *sine numero* values after his name).

Above: Rimrock milkvetch (*Astragalus desperatus*): Jones was "desperate" for a new name for this species that wasn't already taken. Photo by W. Fertig.

Because of his vast field experience, Jones tended to have a better concept of natural species than many of his more herbarium-bound colleagues. In all, Jones named over 700 new species and varieties of vascular plants over his lengthy career. At least 305 of these new taxa came from Utah, of which over 120 are still recognized today. No other botanist before or since Jones has named as many new species from the Beehive State. Dozens of additional species were named by other botanists based on type specimens first collected by Jones.

While Jones discovered and named a wide array of species, he had a special fondness for the milkvetches (*Astragalus*). Jones named over 50 *Astragalus* species from Utah alone. With so many new milkvetches to be described Jones became concerned about running out of original names. In an 1891 paper in the journal *Zoe*, Jones named one new species *Astragalus desperatus* to reflect "...the state of mind a person is in who tries to invent a name for a new species in this immense genus without getting one already occupied." Jones spent years studying the complex relationships within this large genus, culminating in his self-published 1923

## Utah Plant Species Named by Marcus E. Jones, continued

Capparaceae or Cleomaceae (capers)  
*Cleomella palmeriana* (Palmer's stinkweed) Green River, Emery Co., (1890)

Chenopodiaceae (goosefoots)  
*Atriplex gardneri* var. *falcata* (Jones's saltbush) Weiser, ID. (1899)  
*Atriplex gardneri* var. *utahensis* (Basin saltbush) Salt Lake City, Salt Lake Co. (1879)  
*Atriplex graciliflora* (Blue Valley orach) Blue Valley, Wayne Co. (1894)  
*Atriplex saccaria* var. *cornuta* (Blade orach) Green River, Emery Co. (1894)

Crossosomataceae (crossosomas)  
*Glossopetalon spinescens* var. *aridum* (Nevada greasebush) Leptantha Mine, NV (1897)

Fabaceae (peas)  
*Astragalus aretioides* (Cushion milkvetch) Named by Jones in 1898, type collected by Engelmann in WY  
*Astragalus argophyllus* var. *martini* (Martin's milkvetch) Named by Jones in 1923, type collected by Martin from Soda Springs, ID.  
*Astragalus argophyllus* var. *panguitensis* (Panguitch milkvetch) Panguitch Lake, Garfield Co. (1894)  
*Astragalus asclepiadoides* (Milkweed milkvetch) Cisco, Grand Co. (1889)  
*Astragalus beckwithii* var. *purpureus* (Sagebrush milkvetch) Aurum, NV (1893)  
*Astragalus bisulcatus* var. *major* (Johnson milkvetch) Johnson, Kane Co., (1890)  
*Astragalus coltonii* var. *coltonii* (Colton's milkvetch) Castle Gate, Carbon Co. (1889)  
*Astragalus coltonii* var. *moabensis* (Moab milkvetch) Named by Jones in 1898, type from Alice Eastwood near Monticello, San Juan Co.  
*Astragalus cymboides* (Canoe milkvetch) Huntington, Emery Co. (1894)  
*Astragalus desperatus* var. *desperatus* (Rimrock milkvetch) near Cisco, Grand Co. (1890)  
*Astragalus desperatus* var. *petrophilus* (Rock-loving milkvetch) San Rafael Swell, Emery Co. (1914)

*Astragalus detritalis* (Debris milkvetch) 4 miles above Theodore, Duchesne Co. (1908)  
*Astragalus duchesnensis* (Duchesne milkvetch) 13 miles below Theodore, Duchesne Co. (1908)  
*Astragalus eastwoodiae* (Eastwood's milkvetch) Westwater, Grand Co. (1891)  
*Astragalus ensiformis* (Pagumpa milkvetch) 4 mi above Pagumpa, AZ (1894)  
*Astragalus eurekaensis* (Eureka milkvetch) Eureka, Juab, Co. (1891)  
*Astragalus flavus* var. *argillosus* (Clay milkvetch) Green River, Emery Co. (1890)  
*Astragalus flexuosus* var. *diehlii* (Diehl's milkvetch) Farnham, Carbon Co. (1898)  
*Astragalus kentrophyta* var. *coloradoensis* (Canyon kentrophyta) Lee's Ferry, AZ. (1890)  
*Astragalus laccoliticus* (Laccolite milkvetch) Henry Mts, Garfield Co. (1894)  
*Astragalus lentiginosus* var. *palans* (Stragglng milkvetch) Named by Jones in 1898, type from Alice Eastwood in Montezuma Canyon, San Juan Co.  
*Astragalus lentiginosus* var. *scorpionis* (Scorpion milkvetch) Named by Jones in 1923, type from Purpus, Morey Peak, NV.  
*Astragalus lutosus* (Dragon milkvetch) White River, Uintah Co. (1908)  
*Astragalus moencoppensis* (Moenkopi milkvetch) Moencoppa, AZ. (1890)  
*Astragalus musiniensis* (Ferron milkvetch) S of Ferron, Emery Co. (1894)  
*Astragalus newberryi* var. *castoreus* (Beaver Dam milkvetch) Beaver Dam Mts, Washington Co. (1894)  
*Astragalus oophorus* var. *caulescens* (Egg milkvetch) Loa Pass, Wayne Co. (1894)  
*Astragalus pinonis* (Pinyon milkvetch) Frisco, Beaver Co. (1880)  
*Astragalus preussii* var. *latus* (Preuss's milkvetch) Green River, Emery Co. (1891)  
*Astragalus pubentissimus* var. *peabodianus* (Peabody's milkvetch)

Thompson Springs, Grand Co. (1891)  
*Astragalus rafaelensis* (San Rafael milkvetch) Cedar Mt near Woodside, Emery Co. (1915)  
*Astragalus sabulosus* var. *sabulosus* (Cisco milkvetch) Cisco, Grand Co. (1890)  
*Astragalus serpens* (Plateau milkvetch) Loa Pass, Wayne Co. (1894)  
*Astragalus straturensis* (Pine Valley milkvetch) Silver Reef, Washington Co. (1894)  
*Astragalus striatiflorus* (Escarpment milkvetch) above Springdale, Washington Co., UT (may actually be from Kane Co, UT or N AZ) (1894)  
*Astragalus subcinereus* var. *silerianus* (Siler's milkvetch) Sink Valley, Kane Co. (1890)  
*Astragalus toanus* (Toano milkvetch) Toano Range, NV. (1891)  
*Astragalus wetherillii* (Wetherill's milkvetch) Named by Jones in 1893, type by Alice Eastwood from Grand Junction, CO.  
*Astragalus woodruffii* (Woodruff's milkvetch) San Rafael Swell, Emery Co. (1914)  
*Astragalus zionis* var. *zionis* (Zion milkvetch) Springdale, Washington Co. (1894)  
*Dalea lanata* var. *terminalis* (Woolly dalea) El Paso, TX. (1894)  
*Lathyrus pauciflorus* var. *utahensis* (Utah sweetpea) Salina Canyon, Sevier Co. (1894)  
*Lupinus polyphyllus* var. *prunophilus* (Meadow lupine) Robinson, Juab Co. (1909)  
*Psorothamnus nummularius* (Jones's indigo-bush) Green River, Emery Co. (1914)

Gentianaceae (gentians)  
*Gentianella tortuosa* (Jones's gentian) Panguitch Lake, Garfield Co. (1894)  
*Swertia utahensis* (Utah swertia) Buckskin Mts, Kane Co., UT or Cocconino Co., AZ. (1890)

Hydrophyllaceae (waterleaves)  
*Phacelia ambigua* (Jones's phacelia) Needles, CA. (1894)

Liliaceae (lilies)  
*Calochortus ambiguus* (Jones's mari-posa) Flagstaff, AZ. (1884)

opus: “*Revision of the North American Species of Astragalus*”. This work was a significant improvement over earlier monographs that attempted to split *Astragalus* into multiple genera based on fruit characters that defied ready organization. Despite an awkward taxonomic key, Jones’s treatment was the standard for the next 40 years until replaced by Rupert Barneby’s modern classification.

Much of Jones’s scientific work was self-published in Salt Lake City. Like other local western botanists of the late 19th and early 20th centuries, Jones felt stymied by the leading taxonomists of the East Coast, who felt that new species from the West needed their stamp of approval before being published. Jones’s acerbic personality, isolation, and erratic behavior no doubt also contributed to his estrangement from the greater botanical community. Fortunately, science is ultimately self-correcting and Jones’s scholarship has passed muster, so that his contributions ultimately were not lost or hampered.

Despite his numerous personal shortcomings, at least 16 Utah plant species were named *jonesii*, *jonesiana*, or *marcusii* in his memory. The earliest is *Plagiobothrys jonesii* named by Asa Gray in 1886 and based on a type specimen collected by Jones in Needles, California. Indeed, Jones collected the type specimens for 15 of the 16 species named for him by others (the lone exception being *Oxytropis oreophila* var. *jonesii*, named by the gentlemanly Rupert Barneby for his fellow legume-ophile in 1952). Per Axel Rydberg, another great gentleman botanist, named two taxa for Marcus (varieties of *Lepidium montanum* and *Lupinus sericeus*), despite Jones later deriding him in print as a “bughole botanist” (for naming new species based on the number of perforations attributable to insect folivory). Likewise, John Coulter (with Joseph Rose) named a variety of *Cymopterus purpureus* after Jones despite being warned (and ignoring) Marcus’s threat to stay “off his ground” in the western United States (Williams 2003).

Others to name taxa for Jones during his lifetime included Robert



Above: *Chrysopsis* (or *Heterotheca*) *jonesii*, a Navajo Sandstone endemic first collected by Marcus Jones near Springdale, UT and named in his honor by Blake. Photo by W. Fertig.

Woodson (an *Amsonia*), Edwin Payson (*Cryptantha jonesiana*), Sidney Blake (*Chrysopsis* or *Heterotheca jonesii*), Liberty Hyde Bailey (a *Carex*), William Maxon (*Pellaea jonesii*), and Francis Pennell (a beautiful hybrid *Penstemon*). Others who honored Jones after his death were Alice Eastwood (a variety of *Cycladenia humilis*), Arthur Cronquist (an *Erigeron*), David Keck (*Penstemon marcusii*), John Beaman (a *Townsendia*), and Edgar Wherry (a variety of *Phlox austromontana*). Despite some literature references to the contrary, Jones’s one-time mentor turned bitter rival, C.C. Parry did not name the beautiful *Aquilegia jonesii* of the northern Rockies for Jones, but rather for General William Jones, an early explorer of Yellowstone.

Jones himself deemed few of his contemporaries worthy of a specific epithet. One exception was *Cleomella palmeriana*, named for General William Palmer who helped finance some of Jones’s early field work to repay Jones for finding and returning his lost wallet (Welsh 1982). Say what you will about Jones, but he was an honest man!

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*Utah Plant Species Named by Marcus E. Jones, continued*

Liliaceae (lilies)

*Eremocrinum albomarginatum* (Sand lily) Green River, Emery Co. (1890)

Loasaceae (stickleafs)

*Mentzelia integra* (Virgin stickleaf) Rockville, Washington Co. (1894)

Malvaceae (mallows)

*Sphaeralcea cespitosa* var. *cespitosa* (Jones’s globemallow) Wah Wah Mts, Beaver Co. (1906)

Onagraceae (evening-primroses)  
*Oenothera primiveris* var. *bufonis* (Early evening-primrose) Darwin Mesa, CA. (1897)

Poaceae (grasses)

*Calamagrostis scopulorum* (Jones’s reedgrass) Springdale, Washington Co. (1894)

*Elymus salinus* (Salina wildrye) Salina Pass, Sevier Co., (1894)

*Stipa arida* (Mormon needlegrass) near Marysville, Piute Co. (1894)

*Stipa coronata* var. *depauperata* (Depauperate needlegrass) Detroit, Juab Co. (1891)

*Stipa pinetorum* (Pine needlegrass) Panguitch Lake, Garfield Co. (1894)

Polemoniaceae (phloxes)

*Gilia scopulorum* (Rock gilia) St. George, Washington Co. (1880)

*Ipomopsis aggregata* var. *maculata* (Scarlet gilia) Soldier Canyon, Chihuahua, Mexico (1903)

*Ipomopsis depressa* (Low gilia) Desert, Millard Co. (1880)

*Phlox gladiformis* (Daggerleaf phlox) Cedar Canyon, Iron Co. (1894)

Polygonaceae (buckwheats)

*Eriogonum batemanii* var. *batemanii* (Bateman’s buckwheat) Price, Carbon Co. (1898)

*Eriogonum batemanii* var. *ostlundii* (Elsinore buckwheat) Elsinore, Sevier Co. (1898)

*Eriogonum bicolor* (Pretty buckwheat) Thompson’s Spring, Grand Co. (1891)

*Eriogonum corymbosum* var. *aureum* (Golden buckwheat) St. George, Washington Co. (1894)

*Eriogonum flexum* (Bent buckwheat)

*Utah Plant Species Named by  
Marcus E. Jones, continued*

Moencoppa, AZ (1890)

*Eriogonum nummularre* (Coin buckwheat) Dutch Mtn, Tooele Co. (1903)

*Eriogonum panguicense* (Panguitch buckwheat) Panguitch, Garfield Co. (1890)

Primulaceae (primroses)

*Primula incana* (Silvery primrose) above Tropic, Garfield Co. (1894)

Ranunculaceae (buttercups)

*Ranunculus andersonii* var. *juniperinus* (Juniper buttercup) 18 mi W of St. George, Washington Co. (1894)

Rhamnaceae (buckthorns)

*Ceanothus martini* (Utah mountain-lilac) Manti Canyon, Sanpete Co. (1895)

Rosaceae (roses)

*Ivesia sabulosa* (Sevier ivesia) head of Sevier River, Garfield Co. (1894)

*Physocarpus alternans* (Dwarf nine-bark) Duck Creek. NV (1893)

Scrophulariaceae (figworts)

*Penstemon cleburnei* (Fuzzy-tongue penstemon) Named by Jones in 1908 based on Aven Nelson type from Green River, WY

*Penstemon confusus* (Mistaken penstemon) Detroit, Juab Co. (1891)

*Penstemon deustus* var. *pedicellatus* (Hot-rock penstemon) Schell Creek Range, NV (1891)

*Penstemon dolius* (Jones's penstemon) Deep Creek Mts, Tooele Co. (1891)

*Penstemon eatonii* var. *undosus* (Undulate penstemon) St. George, Washington Co. (1894)

*Penstemon pachyphyllus* var. *congestus* (Rockville penstemon) Rockville, Washington Co. (1894)

*Penstemon procerus* var. *aberrans* (Smallflower penstemon) Soldier Summit, Wasatch Co. (1894)

*Penstemon pseudospectabilis* (Spectacular penstemon) Chimiheuis Mts, AZ (1903)

Reference: Welsh, S.L., N.D. Atwood, S. Goodrich, and L.C. Higgins. 2008. *A Utah Flora*, fourth edition, revised. Print Services, Brigham Young University Provo, UT.

*The Legacy of Kimball Harper*

By Tony Frates

Some words, like legacy, are often used to the point where their meaning becomes dull. In the case of Kimball T. Harper (1931-2011), however, he truly left a legacy of passionate students-turned-scientists, and a more informed, impassioned citizenry.

When I returned for my second stint on the board of the Utah Native Plant Society (UNPS) in 1999, Dr. Harper was a fellow board member (continuing until about 1993). I was lucky to hear him speak several times and to interact with him and Dr. Renée Van Buren during Bearclaw poppy field outings in Washington County organized by The Nature Conservancy (TNC) in 2001 and 2002. I last visited with him during a Fish and Wildlife Service recovery plan meeting at Utah Valley University in 2004 where he was a Scholar in Residence after having retired from many years of teaching at BYU. He encouraged the conservation efforts of UNPS, as well as persuading numerous individuals to become deeply involved in plant ecology, range management, and botany.

Dr. Harper was one of the original members of UNPS when it was founded in September 1978. He was the keynote speaker at the second meeting of the society held on November 30, 1978. Kim studied the ecology of biological soil crusts (referred to also as microbiotic or cryptogamic soils) and one of his talks on that topic was discussed in the Nov/Dec 1990 issue. Dr. Harper led many field trips for UNPS, TNC and other organizations. For UNPS he led field trips relating to the Arizona willow (see May/June 1997 *Sego Lily*). In February of 2000 he gave a workshop on the grass family followed by a field trip in July 2000.

Kim Harper frequently participated in the rare plant meetings started by the UNPS in the 1980s. He was the graduate advisor to Deanna Nelson to whom UNPS

awarded a grant in 1987. An abstract relating to that project entitled "Demography of the Endangered Dwarf Bearclaw Poppy" and a research update appeared in the May 1989 *Sego Lily*. Another of Harper's graduate students at BYU, Loreen Allphin, studied *Erigeron kachinensis*, (for which UNPS also contributed a grant). With another student, Lori Armstrong, he published a report on the federally listed Clay phacelia, *Phacelia argillacea* which appeared in the May/June 1992 *Sego Lily*.

It was Dr. Harper who very early on encouraged the idea of experimental plantings with respect to reviving the Clay phacelia. He also urged the weeding of the Clay phacelia preserve which TNC's Elaine York reported on in the July/August 2002 issue. In that article Elaine wrote, "Dr. Harper's passion for Utah's native plants is obvious. His eyes light up when he speaks of several - dwarf bearclaw poppy, evening primrose, bitterroot, and clay phacelia."

In the March/April 1997 issue, UNPS published "Status of knowledge of *Astragalus holmgreniorum* and *A. eremiticus* var. *ampullarioides*" authored by Dr. Harper. Both of these taxa were later federally listed. With Renée Van Buren, he also worked on the Autumn buttercup, Maguire's daisy, Arizona willow and many other species mentioned in various newsletter articles. With Van Buren, Harper published an article in *Western North American Naturalist* in 2004 which analyzed the population dynamics of Dwarf bearclaw poppy over a 16 year period and was referenced in the *Sego Lily* and read at a Red Butte-UNPS rare plant conference.

The foregoing outline provides only a brief glimpse into Dr. Harper's life and his contributions to UNPS. It is just the tip of the iceberg. His work ran deep into the foundation of an increasingly lost science that hopefully will never be forgotten.

Rather than cite each *Sego Lily* article here, the reader is referred to the Newsletters section of the UNPS web site at [www.unps.org](http://www.unps.org).

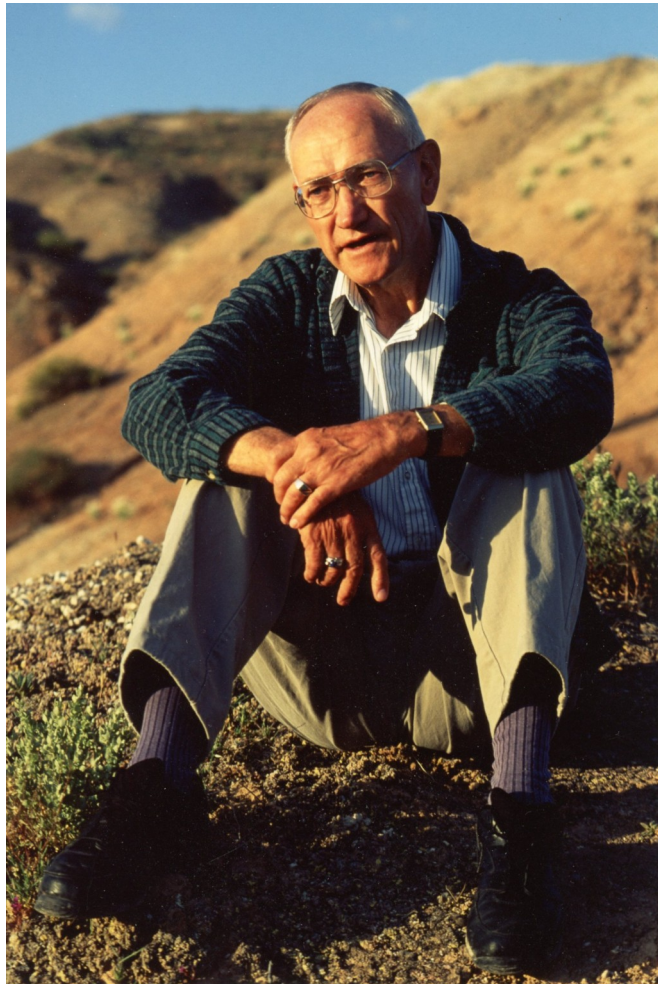
## *A Tribute to Kimball Harper (1931-2011)*

By Renee Van Buren

Kimball Taylor Harper, 80, passed away on Sunday, October 2, 2011 in Spanish Fork, Utah. He was an exceptional scientist, teacher, and mentor, and a friend to many. Kim contributed much to our understanding of plants and their place in the landscapes of the intermountain west. His influence on hundreds of students is evidenced by so many who have chosen careers in plant science, range management, plant ecology, plant conservation and plant taxonomy and who are now making contributions across the Country. Students have honored him with various awards, such as "Outstanding Teacher" in 1986, 1987, 1989, and 1994 at Brigham Young University. In addition, Kimball was a Fellow of the American Association for the Advancement of Science and he received the President's Public Service Award from The Nature Conservancy in 1987.

Kim served the Ecological Society of America (ESA) as a member of the Cooper Award Committee (1987-88) and two terms as a member of the Editorial Board for Ecology and Ecological Monographs (1965-67 and 1975-79). He was chair of the Merit Awards Committee of the Botanical Society of America from 1980 to 1982, and a member of the National Academy of Science Mono Lake Ecosystem Study Committee, from 1985 to 1987. BYU recognized Kim's accomplishments in various ways, such as with Karl G. Maeser Distinguished Faculty awards in 1980 and 1993, and the College Professorship Award of the College of Biology and Agriculture in 1993.

Kimball Harper was born in Oakley, Idaho in 1931. After attending public schools there he served a 2-year mission for the Church of Jesus Christ of Latter-Day-Saints, after which he was drafted by the U.S. Army and served for two years in Korea. Upon completion of his tour of duty, he studied agronomy at BYU, completing his baccalaureate degree in 1958. That same year he married



Caroline Frances Stepp. Kim continued his studies at BYU and completed an M.S. degree in Range Management and Plant ecology in 1960. Kimball then traveled with his family to Madison, Wisconsin where he completed his PhD in Botany with Grant Cottam at the University of Wisconsin in 1963.

Dr. Harper's academic career began at the University of Utah where he taught botany classes from 1963 to 1973. He was befriended and greatly influenced by Walter Cottam while there. In 1973 he accepted a position at Brigham Young University as Chair of the Department of Botany and Range Science. He continued as a faculty member at BYU

until 1996. After serving an 18-month LDS mission with Caroline, he became "Botany Scholar in Residence" at Utah Valley University, where he made significant contributions to the University herbarium, tutored many students and mentored many faculty members. Kim's legacy continues at UVU through a generous endowment for students of botany. The University has named a lecture hall for him in the Pope Science Building.

Anyone who had the great pleasure of Kim Harper's company enjoyed his wit, curiosity, integrity, and delightful personality. He touched our lives and we are better because we rubbed shoulders with this gentle man.

Utah Native Plant Society



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 City \_\_\_\_\_ State \_\_\_\_\_  
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Chapter \_\_\_\_\_

Please send a complimentary copy of the *Sego Lily* to the above individual.

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

Utah Native Plant Society  
 PO Box 520041  
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