



## Colorado Cactus & Succulent Society

**PANDEMIC GUEST EDITOR:  
SCOTT BURKHOLDER**

Let's keep this thing going!

## MONTHLY PLANT SHOW

As we revive our monthly meetings, the MPS will return!

[Club News!](#)

[Meeting  
Information!](#)

[Support Our  
S&S Vendors!](#)

[Plus Lithops  
Book Review!](#)

September 2021, Vol 25 No. 2

The Colorado Cactus & Succulent Society promotes education, enjoyment, cultivation, and conservation of cacti and other succulents among our members and the larger community.



*Echinopsis ancistrophora projensis*  
(Adrian Saunders photo)

## UPCOMING MEETING

**Date:** Tuesday, September 21, 2021

**Time:** 7:00 PM

**Location:** Sturm Family Auditorium (in person)  
Zoom (on-line)

**Speaker:** Steve Brack "Cacti and Xeric Succulents  
of New Mexico"

### Details:

This will be a hybrid meeting, both at the Sturm Family Auditorium in the Freyer–Newman Center at the Denver Botanic Gardens on York Street **AND** on Zoom.

If you can, and are comfortable doing so, please join us at the Botanic Gardens. However, if you prefer the Zoom meeting, please join us online. Watch your email for the link!

# SUCCULENT BITS

## **Grants and Scholarships -**

*The CCSS is always on the lookout for projects that support our mission of plant conservation and education. Projects where we can offer a little financial support.*

*Check Captain Du Toitout's Trail Camera project in South Africa that we're planning to support as an example!*

*Or, do you know of a young budding horticulturist or botanist? Ask them to write up a proposal, and send it to the Board.*



*Turbinicarpus flaviflorus*  
Jackson Burkholder Photo

## **CCSS BOARD ELECTIONS...**

...will be held in October! We need a Secretary, Newsletter Editor and S&S Chairman. *Are You Interested?* Contact me at **seisnoir@comcast.net** for details.

## **October's Meeting -**

October's meeting is typically our celebratory banquet, featuring food, speakers, year-end business, and elections.

Depending on the coronavirus, this year's meeting will be no different. Watch this space for details as they arrive!

## **SEE YOUR NAME AND PICTURES IN PRINT!**

Submissions for the next newsletter are due at the end of the month.

We need your articles and pictures! Do you have an interesting plant? How about an interesting plant story? That you would like to see in print? Send it to me at **seisnoir@comcast.net**.

Please send photos as either JPG or PNG files. As for stories and news, send those as DOC or RTF, or TXT files, please!

## **CSSA Biennial Meeting -**

It hasn't been canceled, just delayed. The 2021 CSSA National Meeting has been postponed until 2023. So stay tuned for more information, and in the meantime attend those webinars! Contact Rod Haenni at **rhaenni@comcast.net** for the latest news.

# NOTES FROM THE RE-POTTING BENCH

*News and Notes from and for September!*

**September's Meeting** - August's hybrid meeting went very well, perhaps better than we could have possibly hoped. Woody gave a great presentation about his trips to Peru, and it's hard to find a better photographer! Plus, more than a dozen folks watched from remote locations.

The new Strum Auditorium is a great new facility! Everyone who attended had a good experience, thanks to comfortable seating and the ability to hear Woody courtesy of the new sound system. Yay!!

So if you are local and comfortable in crowds, please consider coming down to the Denver Botanic Gardens for the in-person part of the meeting. But if you live away from the greater Denver metro area, or perhaps are more comfortable watching from afar, please join us online.

**Scholarships and Grants** - The CCSS is always looking for causes, students, people and projects to support. The Board has been in contact with a policeman in South Africa, who is working to preserve succulents in the Namaqualand region. A lot of the cornerstone plants in our hobby are from this region, and the board would like to support his efforts. At September's meeting we will hold a vote to support this man and his efforts.

Do you have a succulent project or a cactus cause that could use a little push? Do you know a student who wants to be a naturalist, horticulturist, or botanist? Write us a letter, send us a proposal, but make us a deal!

**October's Meeting** - October's meeting is typically our yearly business meeting and celebratory banquet. Coronavirus permitting, it will be again this year! It includes elections for the Board of Directors and we still have three open positions. If you have the time and energy, please consider joining us.

Thanks,

**Scott Burkholder**  
**Current President**  
[seisnoir@comcast.net](mailto:seisnoir@comcast.net)



Autumn is Coming

## --- SEPTEMBER'S MEETING ---

### OUR SPEAKER: STEVE BRACK

I was interested in horticulture from a very young age. Growing up on a small family dairy farm in Wisconsin I started working in the garden as a lad. This interest in plants caused me to go to the local college library after seeing some cacti at a friend's house. For quite some time my interest was in finding more books on cacti and succulents through library loans. In one of the books, I found that it was possible to join Societies and send away for seeds. Early on I got the raising from seed bug, and eventually decided to move to a desert state, New Mexico, to start a nursery to produce seeds.

Once the ball got rolling it just kept on going. My wife and I started Mesa Garden in 1976 and pretty much the rest is history. One of the best parts of the work was taking trips to see plants in nature, and we continue to do this now. In late 2016 we sold Mesa Garden to retire, and now are as busy as ever with plants, growing from seed, and family.

### THE PRESENTATION: CACTI & XERIC SUCCULENTS OF NEW MEXICO

The talk on the 'Cacti and Xeric Succulents of New Mexico' will show many of these plants native to New Mexico. Plants will be shown in all 4 seasons of the year including with photos of the plants partially covered by snow. There will also be many images of the plants in flower. These plants live in NM in a wide range of elevation, from along the Pecos River at the Texas border up to high mountain peaks up to 12,000 ft elevation.

These types of plants are found at nearly all elevations in NM except the highest peaks. The lowest elevation for them is about 2,900 ft for Echinocactus horzonthalonius up to 12,000 ft for Sedums and Rhodiolas. Many of the cacti have spectacularly colorful flowers, and the Yuccas, Agaves and Dasylirions make nice landscape plants over a

## TRAIL CAMS FOR A CAUSE

As some of our members may have seen, CSSA sponsored an inspiring webinar on July 10th featuring a gentleman named Karel Du Toit. Captain Du Toit is a Detective Captain and Commander of a law enforcement unit that focuses on stock theft and endangered species in the Namaqualand region of South Africa. Namaqualand's flora is rich in a wide diversity of succulents and geophytes, many of them unique to the region. Unfortunately, there is a robust internet based trade in plants poached from this region, and Conophytums are the primary target.

Mr. Du Toit described the effects of poaching on the future survival of these special plants. He also spoke about the challenges of apprehending poachers in this vast desert landscape.

As the CCSS's conservation board member I have contacted Mr. Du Toit to inquire about how we might offer support. In response he sent a request for three trail cameras that would be installed and used to monitor vehicles in 'hotspot' areas. The cost to the club for the three cameras would be approximately \$1800.

Follow this link to a recent [New York Times](#) article to learn more about the law enforcement and conservation efforts that Captain Du Toit described in the webinar.

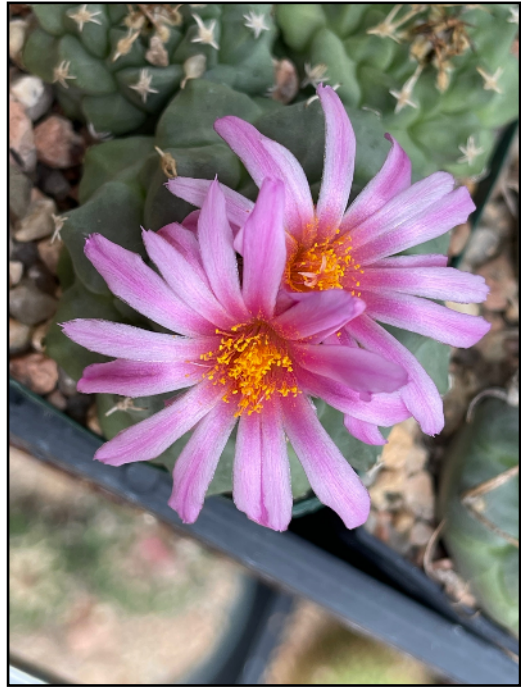
Michael Roll



## PLANT PICTURES!



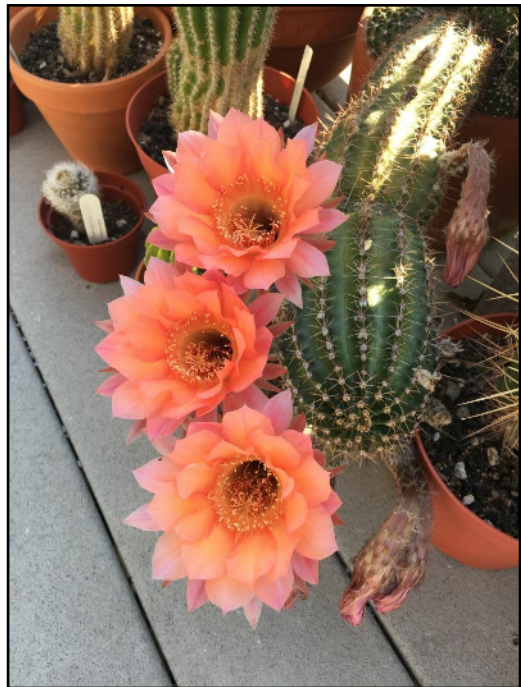
*Chamaelobivia "Rose Quartz"*  
Adrian Saunders Photo



*Turbinicarpus alonsoi*  
Jackson Burkholder Photo



*Neolloydia conoidea*  
Jackson Burkholder Photo



*Trichocereus sp.*  
Adrian Saunders Photo

# LITHOPS IN HABITAT AND CULTIVATION (A REVIEW)

By Roy A. Earle and Janice Round

Artwork by Janet Snyman

Self-Published

July 2021

8.5" x 12" (22 x 30 cm)

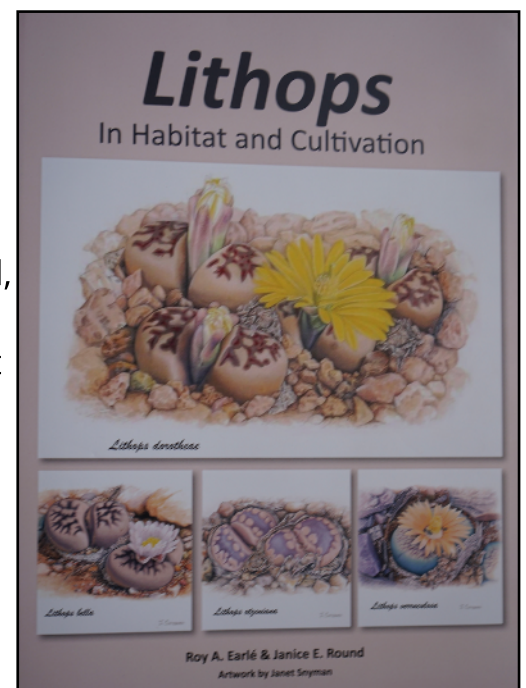
Coated, high quality paper

Stitched binding

405 pp

This magnum opus treatment of the genus *Lithops* recognizes 40 species and 48 subspecies and varieties in colonies occurring in South Africa, Namibia, and just into the southeast of Botswana. In addition, dozens of cultivars and hybrids are described with color photos of each. All of the *Lithops* taxa are illustrated with one or more color habitat photo and most with a color cultivation photo as well, combined with detailed descriptions of each habitat. Janet Snyman's superb watercolor illustrations of each species appear on the opening page of each species treatment. The layout is inviting, with clear and concise writing and easy to read fonts. The presentation of the photos, botanical illustrations, distribution maps, and other figures is of the highest quality. Errors and typos are at a minimum. Two spell-check errors were noted when reading the entire volume; a random 20 pages intensive reading found no errors.

*Lithops* taxa identification is based on reticulate patterns on the translucent or colored top of the stems, (the window), island patterns just beneath the surface of the window, seed capsule and individual seed shape and size, the latter determined by binocular microscope examination and electron microscopy. Seed size ranges from just under half a millimeter to just under one and a quarter millimeter. Genetic determinations of *Lithops* species and subspecies relationships using Amplified Fragment Length Polymorphism (AFLP) were found not to be useful, owing to the youth and rapid evolution of the genus. A recent 2019 genetic study did find some information that may lead to some classification changes in Namibian species.



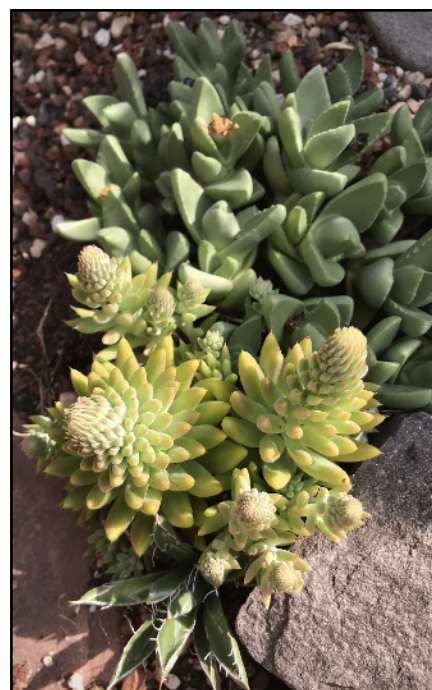
## LITHOPS (CONTINUED)

Andrew Young, a contributor to the book, produced clear and very useful distribution maps of each taxon and the entirety of Lithops distribution in a combined map of South Africa and Namibia. Maps showing additional towns that correlate to field collection numbers would be even more useful as would maps showing overlapping Lithops species. Lithops occur in both the winter and summer rainfall areas, and also in some of the coldest regions of South Africa.

Detailed descriptions and photos of companion succulents are described in the several dozens. Also, a bonus for those interested in growing Lithops outdoors in cold climates or unheated greenhouses or cold frames, is understanding that several species of Lithops (including *L. salicola*, *lesliei* and *verruculosa*) grow amidst known cold tolerant *Aloinopsis*, *Cheridopsis*, *Herroa*, *Ruschia* and at least one *Euphorbia* species. These cold tolerant succulent companions are pictured and described with the specific Lithops taxa that grows alongside them.

I have found that species and hybrids of *Aloinopsis*, *Cheridopsis*, *Herroa*, *Ruschia* and *Euphorbia clavarioides* will thrive in Denver area microclimates, surviving temperatures to -10F (-12C) with no snow cover or frost cloth.

Incorporating the latest scientific and hobby literature, this book is indispensable to any beginning or advanced grower who wants up-to-date information. Cole and Hammer Lithops treatments are frequently referenced and sources referenced occur at the end of each species description and at the end of each of the chapters/appendices. Extensive, detailed information is included for growing lithops from seed and for dealing with pests, such as mealy bugs and mites. Relevant geology, climate change perspectives, new colony discoveries and expansions, electron microscopy of each taxon's seed, comprehensive photos and descriptions of companion succulents and a similar treatment of an extensive Lithops cultivar list greatly build upon earlier authors' commendable efforts.



*Agave, Stomatium, Orostachys*  
Rod Haenni Photo



*Lithops salicola* - Rod Haenni Photo



## LITHOPS (CONTINUED)

The authors detail initial restoration efforts with some Lithops species in Namibia, a cooperative effort with the Lithops Research and Conservation Foundation. Some progress has been made restoring Lithops to colonies previously degraded by early 1900's botanists but much more experimental work remains on what will be a multi-generational effort to determine best methods.

Finally, there is nothing to dislike and much to praise. This treatment sets a new standard for evaluating any important succulent genus. A new appreciation of Lithops awaits beginner and advanced growers and students of Lithops.

The decades of productive field, laboratory, and cultivation research encompassed by this volume makes it a tour de force and a standard reference for personal and library collections. Please treat yourself to this treasure.

This book is only available from Roy A. Earle and sells for £49.95 pounds plus shipping; shipping discounts may be available for orders of 8 or more books at one time. Roy's email is: [safaris.namibia@yahoo.co.uk](mailto:safaris.namibia@yahoo.co.uk)

Rod Haenni 9/6/21 (Thanks to both Tim Harvey and Steve Brack for helpful comments that improved this review).



*Lithops verruculosa*  
Rod Haenni Photo



*Lithops lesliei* - Rod Haenni Photo

# 2021 SHOW AND SALE VENDORS

*We want to thank all the vendors from the Show and Sale!*

**Data Cactus Plants**

Woody Minnich  
[cactusdata@msn.com](mailto:cactusdata@msn.com)

**Front Range Gardens (Emerald Leaf)**

Scott Jefferies & Larry Wyzgala  
[frontrangegardens.com](http://frontrangegardens.com)

**The Clay Center of Northern Colorado**

Tim Preston  
[ClayCenterNC.com](http://ClayCenterNC.com)

**Penny Woolsey**

[eyeferget@gmail.com](mailto:eyeferget@gmail.com)

**Ethical Desert**

Donnie Barnett  
[ethicaldesert.com](http://ethicaldesert.com)

**Carol Wichern**

[Carolwichern@gmail.com](mailto:Carolwichern@gmail.com)

**Blazing Star Greenhouse**

Gary Davis  
[davis6605@esrta.com](mailto:davis6605@esrta.com)

**Sills Alive**

Jill Marble  
[sillsalive.colorado@gmail.com](mailto:sillsalive.colorado@gmail.com)

**All Its Own**

William Haggerty  
[all-its-own.com](http://all-its-own.com)

**Precision Cactus Growers**

Jackson Burkholder  
[PrecisionCactus@gmail.com](mailto:PrecisionCactus@gmail.com)

**The Succulent Garden**

Sam Hitt  
[sam@wildwatershed.org](mailto:sam@wildwatershed.org)

**Andrew Dolan**

[adoolen87@gmail.com](mailto:adoolen87@gmail.com)

**Rocky Mountain Fresh**

Kylee Hix  
[KyleeHix@outlook.com](mailto:KyleeHix@outlook.com)



There are still a few Show and Sale TeeShirts available.

# 2019 COLORADO CACTUS AND SUCCULENT SOCIETY BOARD OF DIRECTORS

## SCOTT BURKHOLDER

Pandemic President  
seisnoir@comcast.net

## ADRIAN SAUNDERS

Treasurer  
adrian.saunders@comcast.net

## STEVE HARLEY

Membership  
ccss@paper-ape.com

## SECRETARY

Secretary (open)  
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## RANDY TATROE & PANAYOTI KELAIDIS

Vice-Presidents, Programs  
rtatroe@q.com  
KelaidiP@botanicgardens.org

## NEWSLETTER

Newsletter (open)  
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## SHOW & SALE

Show & Sale (open)  
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## MICHAEL ROLL

Conservation and Hiking;  
MichaelJRoll@gmail.com

## UPCOMING PROGRAMS & EVENTS:

September 21 - CCSS Hybrid Meeting

October 23 - CCSS Annual Banquet

November 16 - CCSS Hybrid Meeting

## JOIN THE CONVERSATION:



<https://www.facebook.com/CoCSS>

<https://www.instagram.com/coloradocactus/>

<http://www.coloradocactus.org/>