



the BULLETIN

A quarterly publication of the Arboretum Associates

Winter 2013 Vol.36, No.1 & 2

Tale of Two Collections:

In addition to geographically based collections from California, southern Africa, New Zealand, and Australia, we have the conifer collection based on the cone-bearing plants classified as conifers and the succulent collection based on plants with specific adaptations to low water availability. In each of these collections the Arboretum has plant species useful for research and conservation education that are also critically endangered in the wild.

Succulent Collection at the Arboretum: Conservation Challenges and Successes

Among the diverse species of succulents in the Arboretum's collections are horticultural treasures and some of the rarest, most endangered species in the world. We hope that many of the threatened species we study in the genus *Dudleya* are true to their names as liveforevers. When I found out I might have the only plant left of the San Benito Island liveforever, I became quite nervous about the responsibility. The plant

had come to me 26 years earlier, before rabbits had been released as game animals for the few residents of the Baja California island. I came to know of its extreme rarity, when an expedition had not found any of the liveforevers in the wild. There was some thought and hope that because there had not been a thorough search, some were still on the island.

One of big questions about this and some of the rare succulent plant species we study is: whether all of the species will survive in the wild for the next five to ten years? The

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Conifer Collection at the Arboretum

When I first started working at the Arboretum in 1985, an Australian visitor said, "I have visited all seven of the populations of *Microstobus fitzgeraldii* in the wild and counted all 256 plants in the species. I have tried unsuccessfully to duplicate it's wild growing conditions by setting up an artificial waterfall to keep my cuttings damp. It says here on the sign you have a good collection of conifers. Do you have the *Microstobus*?" I said, "Yes, Brett has some growing over here in an area he waters every three weeks or so during the dry season." The visitor was flabbergasted and wouldn't believe it until I showed him the plants. We may have benefited from a lack of a pest here that plagues the plants in Australia. The Australians have since managed to very successfully raise *Microstobus* in their country.

Though many casual visitors don't yet recognize the importance of our conifers or know stories like the one above, we have testimony from conifer experts who wrote in the letter below, what they value and why they get so excited when they get to visit and take cuttings.

– Stephen McCabe

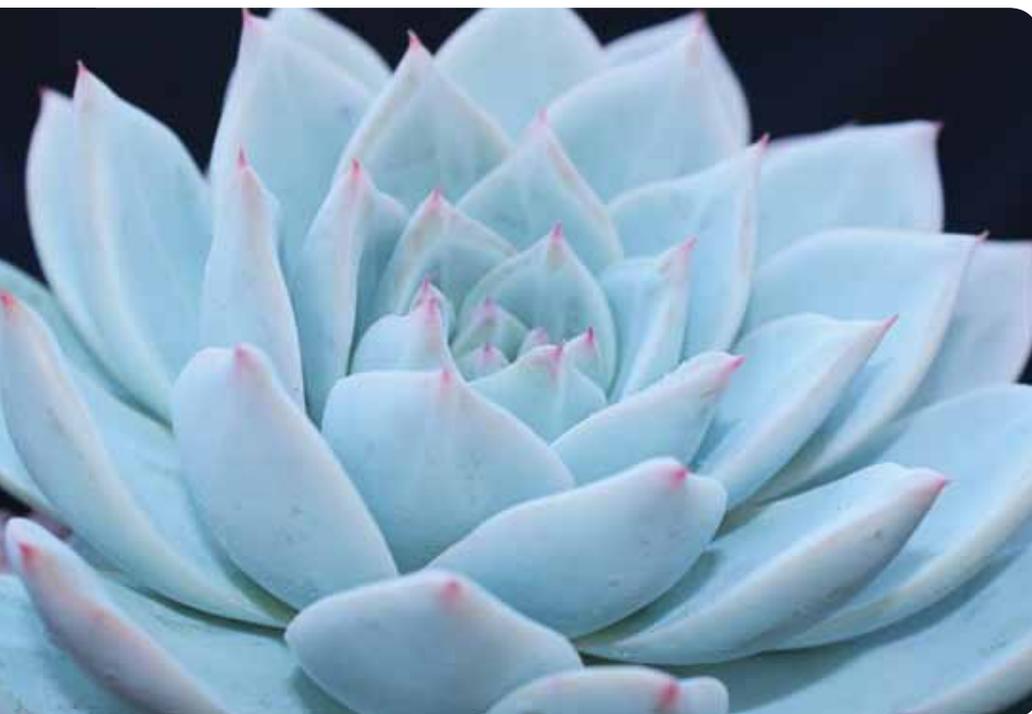
Letter about the UCSC Arboretum conifer collection.

To Whom It May Concern:

The Arboretum of the University of California Santa Cruz functions as a singularly unique refugium for an amazing diversity of plants from around the world. The Arboretum has, without question, the most diverse and remarkable collection of southern hemisphere plants in the Americas (probably also including Europe).

The Southern Hemisphere conifers in the Arboretum constitute an especially unique collection. Many of the taxa from the South Pacific (especially New Caledonia) are found nowhere else in

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Echeveria colorata X subsessilis, a Bob Grim hybrid that has not been propagated for sale yet.

Great Expectations for the Spring Sale April 20, 2013

People are excitedly looking forward to the plants that will be at the Arboretum's Annual Plant Sale. To mix genres, a much anticipated plant is *Grevillea petrophiloides* 'Big Bird'. The flowers are not bright yellow as Big Bird's feathers are. The cultivar name refers to the long thin flower stalk with a tuft of flowers being analogous to the long, thin tail with a tuft of feathers that are signatures of Big Bird from Sesame Street. Sesame Street has paid homage to Dickens in "A Sesame Street Christmas," with Oscar the Grouch playing Scrooge, and in many other ways ("it was the best of oatmeals, it was the worst of oatmeals.")

Those expectantly thinking that "someday the Arboretum will have more of those to sell" will look forward to purchasing one of 20 of the notoriously difficult to propagate Island Bush Poppies specially reproduced by volunteer Linda Willis using novel germination techniques.

We will have cutting grown plants of the Silver Tree, *Leucadendron argenteum*. These are best grown in milder winter areas of the central coast, in sunny areas with some air circulation.

Arctostaphylos insularis 'Ward' - one of the two manzanitas growing by Norrie's

Pimelea nivea - striking contrast between forest green upper and white leaf undersides

Banksia spinulosa 'Nimble Jack' a new one for us

Protea 'Pink Ice' -one of the easier to grow of the proteas, feathery pink and white

Protea neriifolia - Pink Mink, feathery pink and black

Leucospermum 'Spider' - a reliable pincushion protea

Grevillea 'Robyn Gordon', G. 'Mason's Hybrid' G. 'Superb' - three similar, showy, long blooming grevilleas though grevilleas usually are deer resistant, these three are surprisingly not)

Leucospermum cordifolium various colors

Banksia ericifolia 'Fireworks'

Boronia crenulata 'Rosy Splendor'

The Plant sale list will be on our web site by April 12th

Associates are now Friends: Annual Meeting

In 1976 the Arboretum Associates were formed. The inaugural Bulletin of the Associates was titled "A Ship is Launched" because there were great expectations of what they could accomplish. Dean McHenry and friends named the original support group the Arboretum Associates to convey a seriousness and commitment of the group to helping the Arboretum. Over time, more and more support groups became known as "friends of...", so the terminology has changed and many of our visitors and members were confused about what the Associates were, while they understood right away what the Friends of the Farm and Garden were. At our September 9, 2012 Annual Meeting of the Arboretum Associates, a motion from the Board to change the name to the Friends of the Arboretum at the University of California Santa Cruz was put forward and passed.

The Friends of the Arboretum is still a support group and we will not lose sight of the commitment to the Arboretum and its ties to its campus that promotes a great liberal arts education.

At the Annual meeting, President Mike Gerhold passed the wheel to the next Arboretum Associates skipper, Julia Cowell, who had been so active with the events committee. Tom Karwin continues as vice-president and Julia Fiske-Bailey is the new Secretary. We also welcomed to the Board of the (now) Friends of the Arboretum, Andrea Hesse, Anastasia Torres-Gil, Sherry Wasserman and Keith Wandry. Their biographies are on the Arboretum's website arboretum.ucsc.edu. As is usual at the annual meeting, many plants were given away as door prizes. The food was tasty and plentiful, so there was no Oliver Twist wanting for more.

Memorial Bench for Emily Clark

Dedicated volunteers Mike and May Clark have donated a bench in honor of Mike's parents Emily and Don Clark. Emily cheerily and quickly repotted plants for Arboretum plant sales for three decades before retiring at the age of 90, several years ago. She continued to attend Arboretum events until relatively recently. Emily and her husband set up the Clark Endowment for the Arboretum's Jean and Bill Lane Library shortly after the founding the library. Donald was the founding Librarian for the University's main Library, which later became known as the McHenry Library, named after the founding Chancellor, Dean McHenry. An area of the library is named the "Donald T. Clark Courtyard." In addition to their generous gifts to the

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Arboretum over the years, the Clarks also gave to the main library. The Arboretum's Clark Bench is sited near the Australian picnic area, facing the Great Meadow and Upper Arboretum.

Successful Event

The **Arboretum** Gift and Wreath Sale held in November together with Norrie's Open House was a tremendous success thanks to all of our wonderful volunteers. There were many beautiful creations. The following visiting artists contributed pieces to the sale.

Peggy Snider	Carol L. Riddle	Karen Close
Dawn Collins	Lise Bixler	Nancy Gerdt
Rain Jordan	Erica Perloff	Diane Landy
Mary Wyatt	Heather Cozette Shannon	

Nurseries who contributed succulent plants for the Fall Sale or both the Fall Sale and the Gift and Wreath sale were Naomi and Frank Bloss of California Succulents, Monterey Bay Nursery, and Succulent Gardens.

Student intern apprenticeships increase during the summer of 2012

Matching funds matched by several individual donors, the Woodside-Atherton Garden Club, Green Endowment, and the Ray Collett Trust. Well over \$15,000 was donated, exceeded the amount needed to match the \$10,000 pledged by anonymous donors who have made successive gifts to the cause of educating student interns who are working their way through college. We are now fund-raising for summer students for 2013.

Planned Giving: Ensuring the Future of the UC Santa Cruz Arboretum

Over a number of years, a cow pasture was changed into the Arboretum. Imagine the satisfaction of your continuing to watch the Arboretum gardens, education programs, and conservation efforts grow. A significant portion of the funding each year and all of the endowment funds that support the conifer, succulent, Australian, South African, Californian, and New Zealand plants have come from individual's planned giving and estates. Additionally, planned giving is a great way to make a charitable contribution and improve your current income stream. By integrating a planned gift to UC Santa Cruz Arboretum into your overall financial, tax, and estate planning, you can realize significant financial gains in the form of a charitable tax deduction AND an income stream for life. In addition, a planned gift made with appreciated property can save you capital gains taxes.

Structuring a planned gift deserves time and careful thought. As you explore the options for planning a gift, we suggest you consult with your financial advisors, such as an estate planning attorney or accountant. Through estate planning, one can leave a permanent legacy to nurture the Arboretum's gardens and programs. We would be happy to assist you in this process and we have a network of professional advisors that would be happy to serve you. Please also consider allocating a percentage of your gift as unrestricted. These funds enable the Arboretum to take advantage of unanticipated opportunities or respond to emergencies.

Memberships

Memberships: If all members try to get one new member and half succeed, we would have more support for our plant introductions. Think how many more plants we could provide at sales both in terms of the number of plants in a batch and the kinds of plants offered. If you are shy about talking up memberships, just bring a few friends to the Arboretum for a stroll or a picnic. During good weather, the place sells itself.

Sponsor a Rare Plant

- A rare *Manzanita*
- A rare *Dudleya*
- A rare conifer
- A new Australian plant cultivar introduction
- A new succulent plant cultivar introduction

- \$50 to sponsor a single plant
- \$500 to sponsor a cultivar
- \$1000 to sponsor a species



Dudleya stolonifera, the Laguna Beach live forever, is listed as a California Rare species and is known from only six localities.

Sponsor a garden bed, amount varies per bed

To become a sponsor, or if a list is not available at arboretum.ucsc.edu, email Stephen McCabe smccabe@ucsc.edu for a current list of opportunities.

Please call us about planned giving and naming opportunities. You may donate by making checks out to "UCSC Foundation" & send them directly to: attn: Stephen McCabe, Arboretum, 1156 High St., Santa Cruz, CA 95064 (831)427-2998 (ext. 105 for messages) or visit the University's website about planned giving plannedgifts.ucsc.edu/

Our contact is University's Director of Planned Giving: Virginia Rivera.

Haworthias and Other Window Plants for the Winter.

Along California's central coast there are plants that can grow by windows, plants that should grow indoors by windows to protect them from frost or rain, and plants that are themselves "windows". Rain, frost, shade, and the combination of those things makes it very difficult for some succulents to survive. People have a wide variety of strategies to assist their plants to cope with winter. A simple solution is to bring the plants indoors from November until March or April to dry out. Keeping the plants fairly to very dry through the winter is a good way to avoid fungus problems for the more sensitive species too. Another strategy for succulents that are somewhat tolerant, but may have some problems in the cold and damp, is to put them underneath the eaves of your house. In our area, the coldest nights are very still and the cold drops straight down, so anything under the eaves will get a couple of degrees of protection and will receive less rain. A tree can provide a couple of degrees of frost protection for plants under it, but it will obviously let the rain through. Any house leaks some heat, so next to a house is usually warmer for this reason too.

Some plants that may or may not be grown on a window ledge are *Haworthias*. The low growing ones will pull themselves down level with the soil, if given the opportunity in a raised bed or large pot and their leaves will be partly underground. Translucent "windows" let light through the interior of the leaves to where there is chlorophyll for photosynthesis. So in these window plants, photosynthesis may take place underground! The more above ground species like *Haworthia attenuata*, don't have the translucent windows, but will still grow well on a windowsill through our winters. Some species of *Haworthia* and the

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Tale of Two Collections (cont'd - p. 1)

Arboretum has helped species on the brink of extinction by assisting with recovery or research on the plants. We have participated in several success stories over the years.

The San Benito Island liveforever at first proved very slow to propagate in collection. Eventually, we went from one to 12 plants. Fortunately, by then the plants started recovering in the wild from seed in the soil after the Mexican government, Conservación de las Islas, and Island Conservation removed the rabbits that were decimating the San Benito plants.

More successes

In a similar scenario, on a California island, the Santa Barbara Island Liveforever was prematurely declared extinct, then found to have five plants remaining in about 1975. Recovery of the Santa Barbara Island liveforever is proceeding slowly after the removal of rabbits on this island too. It has recovered enough that it is no longer among the very most endangered *Dudleya*.

On a third island, Santa Rosa Island, in 1997, I named the munchkin dudleya (*Dudleya gnoma*) and pointed out that about 10% of the remaining plants had been trampled and uprooted by non-native grazing animals. The naming led to a fence being erected around the less than an acre of land supporting the last 3400 plants. Once the protection of the fence was in place, the US Fish and Wildlife Service no longer felt the munchkin *Dudleya* needed to be placed on the endangered species list.

My students and I are working on the classification and ecology of 45 species of California and Baja California *Dudleya* that are rare enough to qualify for the CRPR (CNPS) list 1B. The 1B list is for the rarest plants that are not yet extinct. Though some rarities have been known for over 100 years, some of the rarest liveforevers, aka *Dudleya*, have only recently been named or are yet to be named. There are many species more rare than the federally endangered, serpentine endemic only found in southern Santa Clara Valley, *D. abramsii setchellii*. It is not that *D. a. setchellii* shouldn't be listed as endangered, it is just that the immediacy of the threats to some other species is even greater. Truly this is a group with a lot of rare species.

Our vision is to name the *Dudleya* species that should be named, have a reference collection at the Arboretum for amateurs and professionals, have stock for repopulating the wild (if necessary), plants for sale, and displays to help convince people of the beauty and value of the many species of liveforevers. To accomplish these things and keep the collection healthy and thriving in the future, we will encourage volunteers, fundraise, write up and publish research, get the pressed plants into a formal herbarium, and

accession plants by transferring data from field notebooks into a widely available Arboretum database. In addition to the succulents, we have threatened conifers and other plants from New Caledonia, South Africa, California, and Australia. By supporting the Arboretum's work, you will be helping students learn and become part of more success stories of plants brought back from the brink.

Succulent horticulture, Plants for Home Gardeners

Among the horticultural part of the succulent collection, there are examples where we were given a single specimen of a hybrid. We used some of the same care in taking care of single horticultural specimens as we did for some of the wild specimens. Several hybrids have significant potential for collectors and home gardeners, and we want to make certain those hybrids survive too.

We have for a long time grown a number

of plants from noted succulent hybridizers Victor Reiter Jr. and Bob Grim. (see photo) Some of these plants are only at the Arboretum and nowhere else in the world. Some we have backed up at other arboreta in the state thanks to a grant for the Saratoga Horticultural Foundation. We also have a smaller number of hybrids from Jack Catlin, Frank Reinelt, and Dick Wright. Almost all of the special succulent plants are from the western hemisphere and are in the stonecrop family (Crassulaceae). The common name of the family is named after *Sedum*, which is also known as stonecrop.

Reiter especially worked on hairy-leaved *Echeverias* to produce hybrids with large flowers (e.g. *Echeveria* 'Set-Oliver' and *Echeveria* 'Pulv-Oliver'), though a couple of his creations were of the waxy, not hairy, forms (*Echeveria* 'Carla'). In succulent societies Reiter was famous for *echeverias*, while elsewhere he was known for developing the first white fuchsia and for his introductions to California horticulture.

Reinelt worked on non-hairy, reddish, cold-hardy *echeverias* (*Echeveria* 'Frank



Haworthias make good window sill plants.

Reinelt, *Dudleya* 'Frank Reinelt'). Both Reinelt, who used to have a place across the street from the Arboretum and was famous for begonia hybrids, and Reiter were among the Arboretum donors mentioned in the first "Notes from the Arboretum," the forerunner to this publication. Very recently, we received Jack Catlin *Aeonium* hybrids from Jack's niece, Trudy Karl, and her husband Karl Karl. His hybrids include *Aeonium* 'Cyclops', 'Voodoo', and 'Velour'. While many of the selections from Reiter, Reinelt, and Catlin have been widely distributed over the last 10-80 years, we also have some of their choice plants that have either slipped out of general circulation or were never easily available.

Another *Echeveria* (and relatives) collection came from Bob and Margaret Grim of San Jose. Some of their plants have worldwide distribution, but others with wonderful pastel waxes on the leaves exist only in one greenhouse with few or no duplicates. Among all of the stunning plants in the stonecrops just mentioned, we would like to make back-ups of the rarest choice forms, get some of those back-ups off-site, and make the best available to the public through our plant sales. Some

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Threats to *Dudleya* in California and Baja California include

- urbanization, direct and indirect. e.g. grading, erosion, changes in hydrology
- non-native grazing animals
- native caterpillars, mealy bugs, aphids
- elimination of pollinators
- non-native pests?
- global warming/faster coastal erosion
- invasive non-native plants: iceplant = *Carpobrotus*, *Mesembryanthemum*, *Malephora*, Jade plant, red Valerian, pampas grasses, *Aloe*, *Cotyledon*, *Agave*, *Myoporum*, cacti, grasses, etc.
- nitrogen deposition (from cars on busy roads) leading to stronger growth of grasses and other competitors,
- rock climbing
- vandalism
- carving names in mosses that are seed nurse plants
- trail building
- native birds nesting on islands
- collectors



Brett Hall

Happy New Year everyone! Thanks to plentiful rains so far this winter, we are anticipating a floriferous spring and lush growth throughout much of California. We anticipate a wonderful flowering in the Arboretum this year so please visit us often. Among the current attractions and accomplishments in the Arboretum that you will find is the installation of phase two of the Australian Rock Garden. The work is the result of amazing energy and artistry of Australian Curator, Melinda Kralj. You will also notice new landscaping near the Arboretum front Gate that Cali-

fornia Curator, Rick Flores installed. If you wander long enough you may discover the recently developed and wonderfully rustic, Children's Nature Awareness Center which is named *sinnikmata* (meaning "place of the children" in the Mutsun language) and if you wander *out of bounds* [out the back gate] you could find the central coast maritime chaparral plantings in the "back forty" where nearly 300 manzanitas are planted (among other genera) representing dozens of population-based collections of about 35 taxa.

Year by year the wildlife (including birds, butterflies, bees, and other insects) in the Arboretum is growing richer. Thanks to volunteers like the extraordinary, Linda Willis and Clive Bagley, we have an on-

going butterfly monitoring program and new butterfly plantings. And thanks to Dr. Gordon Frankie of UCB and the Urban Bee Project, we will continue to have a native bee monitoring program. (The Arboretum will be hosting a native bee workshop at Hastings Reserve in Carmel Valley on June 7, 8 and 9th).

We have a great speaker line up for you this winter and early spring in Ray Collett's Rare and Extraordinary Plants Lecture Series with an intriguing talk on prairie grasslands in February, a naturalist's presentation, and an exhilarating presentation on northwestern Californian conifers in late March.

Our late founding director Ray Collett loved northwestern California and was forever inspired by the region and its conifer Diversity! He would have enjoyed the following book, which is available at Norrie's Gift Shop.

Conifer Country: A Natural History and Hiking Guide to 35 Conifers of the Klamath Mountain Region by Michael Edward Kauffmann. 2012. 206 pages.

Backcountry Press, Kneeland, CA. \$22.95, soft cover. ISBN# 978-0-578-09416-8. Order online through CNPS.

Conifer Country by Michael Kauffmann is the perfect guide to the conifers in the Klamath Mountain region. It is a fresh and personal journey into one of the richest lands on earth. Few places in the world offer the diversity in conifer genera and species as the Klamath Region will. Few regions on the planet are as rich in geologic diversity and offer the range of elevation gradients, aspects, habitat diversity, and climatic profile.

We can think of the Island of New Caledonia in the Australasian region of the South Pacific where 43 or more endemic conifers occur, many restricted to serpentine soils. As *Conifer Country* describes, the Klamath Mountains also host extensive serpentine areas, and venturing a little east and west and north from the Klamath Range easily brings the numbers of conifers close to or surpasses those of New Caledonia. While the Klamath Mountains cannot boast as many endemics, there certainly are some spectacular ones, like Brewers spruce (*Picea breweriana*), for example, as well as many other rare and disjunct stands and occurrences.

Who is this book written for? On the back cover the author explains:

It is for plant lovers, hikers, and backpackers—for the novice and expert botanist alike, it is for people who want to get into the field, explore wild places, and understand why the Klamath Mountain region nurtures unique plant diversity.

In a world bombarded by smart phone applications and virtual realities, *Conifer Country* challenges us to get back in touch with our ancestral adventuring roots. Michael Kauffmann entices us to go out to find these majestic and wonderful conifer stands. Though he cautions us to prepare for rugged wilderness terrain in lands devoid of cell phone towers and acknowledges that fitness and wilderness skills are essential, he provides detailed maps of over 25 hikes and a wealth of conifer education. The guide covers taxonomy, biogeography, paleontology, human use, Native American perspectives, fire ecology, local history, and much more. It includes color plates to aid in identification with generously interesting species descriptions. Best of all, the book is grounded in Kauffmann's direct experience exploring the Klamath Region.

– Brett Hall

Haworthias and Other Window Plants... (cont'd - p. 4)

related *Gasteria* are tolerant of bright sun, if introduced to it gradually, but can take a surprising amount of shade if they are kept fairly dry.

A couple I gave *Aloe* cuttings to live near the San Lorenzo River in Felton, California. When I gave them the cuttings, they had just moved in and there was sun. Now that it is later in the year, it is very shady all day. I suggested they take the newly rooted cuttings and either put them under the eaves or dump out almost all of the soil in the pots. The *Aloe arborescens* will do fine with almost no soil during the dark of winter and will be less likely to lose the roots to rot. Again, the main trick to getting succulent plants to survive darker, damper areas along the central coast is to protect them from a combination of too much water and cold. Many will beautifully coast through to springtime.

[The advice above is good for a number of common succulent plants in areas with mild frosts and 20 or more inches of rain. What to do with cold hardy winter growers in a similar climate could be the topic of another article. Some of both kinds of window plants are available at the Arboretum's Gift Shop 10-4 every day.]

If you do have frost or fungus damage to your succulents, try to keep them dry and 40° or warmer and pull off, but not cut off, rotting pieces. Don't cut into the damaged plants, unless you really have to, until the warmer, drier months of April, May or June.

– Stephen McCabe

Tale of Two Collections

of their most widely distributed hybrids worldwide are *X Crennosedum* 'Little Gem' and *X Pachyveria* 'Opalina'.

Our vision is to maintain historical Crassulaceae* collections from the gardens of Victor Reiter Jr, Bob Grim, and Jack Catlin and provide the public with opportunities to see and/or obtain these beautiful succulent plants. It is also to continue to develop for the nursery industry and the public new and exciting cultivars within the Crassulaceae and other groups of succulents. We also maintain a wide variety of other succulents for teaching purposes, for displays, and for propagation as sale plants.

– Stephen McCabe

*Several genera, including *Dudleya*, *Echeveria*, *Sedum*, *Pachyphytum*, *Graptopetalum*, and *Aeonium* are all in the family Crassulaceae, also known as the stonecrop family.

calendar of events

February 2013

february

TOUR OF THE ARBORETUM

Saturday, February 2, Groundhog Day

1st Saturday of every month, free with admission. Meet at Norrie's at 11:00 am.

COMMUNITY DAY

Tuesday, February 5

1st Tuesday of every month. Free admission to the Arboretum.

VOLUNTEER APPRECIATION POTLUCK

Tuesday, February 12

Noon to 2:00pm

Our continuing volunteers provide a fine potluck feast for our newer volunteers. Staff thanks both groups by providing desserts. For this event, we ask that you RSVP to (831) 427-2998 by February 4th.

RELEARNING GARDEN TALK

Friday, February 15

4:15 pm

By Rick Flores, \$25. See website.

EVENING LECTURE

Tuesday, Feb. 19

6:00 pm potluck. 7:00 pm talk

Glen Holstein. "California Prairies"

march

TOUR OF THE ARBORETUM

Saturday, March 2

1st Saturday of every month, free with admission. Meet at Norrie's at 11:00 am.

UCSC ARBORETUM HUMMINGBIRD DAYS

Saturday and Sunday, March 2 and 3

Children's activities: 10 am - 4 pm

Check web calendar for updates on specific activities as date approaches.

COMMUNITY DAY

Tuesday, March 5

1st Tuesday of every month. Free admission to the Arboretum.

EVENING LECTURE AND POTLUCK

Monday, March 11

Potluck 6:30 pm, joint meeting 7:30 pm

California Native Plant Society and Arboretum potluck. Greg Suba, Conservation Program Director of the CNPS. "CNPS & Plant Conservation in California."

EVENING LECTURE

Thursday, March 14

6:00 potluck, 7:00 talk

"Thinking like a Naturalist: Reclaiming the Art of Natural History" by Jack Laws.

WORKSHOP: "Nature Journaling: the door to deep observation."

Friday, March 15

A workshop with Jack Laws. See website for cost and details.

ARBORETUM FUN(D) RAISER

Thursday March 21, 2013

5:00-8:30 pm

5:00-6:00 Check in, then Enjoy the Garden

6:00-7:00 Dinner

7:00-8:30 Entertainment & Auction

Master of Ceremony: Melinda Kralj

Bring a dish to share & whatever you would like to drink. In addition, please bring ONE of the following:

\$10 per person or Something for the Auction Table (you set the starting bid) or Entertainment

Ideas for the Auction Table: plants, services, artwork, you name it!

Ideas for Entertainment: music (anything that doesn't require special setup), skits, plant talks (short & entertaining), poetry, dance... Surprise us!

RAY COLLETT RARE AND EXTRAORDINARY PLANTS LECTURE SERIES

Friday, March 22

6:00 potluck, 7:00 talk

Michael Edward Kauffmann, will talk on the subject of his new book: Conifer Country: A Natural History and Hiking Guide to 35 conifers of the Klamath Mountain Region.

CALIFORNIA NATURALIST PROGRAM

10 week certificate program begins

Thursday, March 28, 2013

\$350 See website for details.

april

COMMUNITY DAY

Tuesday, April 2

1st Tuesday of every month. Free admission to the Arboretum.

TOUR OF THE ARBORETUM

Saturday, April 6

1st Saturday of every month, free with admission. Meet at Norrie's at 11:00 am.

CALIFORNIA NATIVE PLANT WEEK

April 14-21

NATIVE PLANT TOUR

Sunday, April 14

10 am

Tour of the native plant garden, with emphasis on plants that may be available at next Saturday's sales. Led by Rick Flores, Curator of Native Plants

SPRING PLANT SALE (HELD IN CONJUNCTION WITH THE CNPS PLANT SALE)

Saturday, April 20, 2013

10-noon Members only. Member of either group.

Noon-4:00 everyone welcome.

Memberships available at the door.



Silver tree, photos this issue by S. McCabe

Conifer Collection (cont'd - p. 1)

cultivation in the Americas. For example, the arboretums' specimens of *Araucaria humboldtensis* constitute an amazing conservation and scientific resource. This species, found only at the top of Mt. Humboldt in New Caledonia is now in decline in its natural habitat and seems to no longer be setting viable seed. After five trips to New Caledonia, the Royal Botanic Garden Edinburgh, one of the premiere plant research and conservation institutions in the world, has only two small rooted cuttings of this species. However, the UCSC Arboretum has at least 5 healthy trees from a visionary expedition by its director, Brett Hall, in 1980. Another

special conifer highlight is *Austrotaxus spicata*, with the specimen at UCSC constituting the only living plant of this species in the Americas or Europe. Other priceless conifer treasures in the collection, found nowhere else in the Americas, until very recent propagation efforts to back up the collections, include: *Libocedrus yateensis*, *Agathis atropurpruea*, *Araucaria muelleri*, *Dacrydium balansae*, and *Dacrydium nausoriense*.

As national and international laws regarding movement of plants become increasingly restrictive, the value and accessibility of the Arboretum's collection continue to grow. The fact that its collections are accessible for study in an era where accessibility to plants is becoming increasingly difficult makes this highly accessible resource all the more

precious. The current living collections at the UCSC Arboretum would be impossible to replicate today. These collections are invaluable and they should be conserved so that they will always be available for science, conservation, education and public appreciation.

We have been exploring, studying, and contributing plants to the collections at the Arboretum for several years and are extremely impressed with the amazing diversity of

plants the staff has successfully grown. Few gardens succeed so well in maintaining so many rare plants for so long. This is a powerful testimony to the dedication of those who have been devoted themselves to the garden. Director Brett Hall has shown his remarkable dedication during more than three decades of efforts to making the Arboretum the world class botanical institution it has become. We wish to continue working with the dedicated staff of the Arboretum to continue building the collections. Therefore, we strongly encourage support of the UCSC Arboretum, which is a priceless treasure and refuge for an unparalleled collection of plant biodiversity. The Arboretum must be preserved for current and future generations of students, researchers and conservationists.

Sincerely,

Chad Husby, Ph.D.
Collections Manager and Botanist
Montgomery Botanical Center
Miami, Florida

Ron Determann
Conservatory Director
Atlanta Botanical Garden

Jason Smith, Ph.D.
Assistant Professor of Forest Pathology
School of Forest Resources
& Conservation
University of Florida

dated: December 4, 2009



Araucaria cunninghamii. The Arboretum has a number of *Araucaria* from New Caledonia, Australia, and Chile.

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