



Fancy and Fondness

by Michael Papay

We become accustomed to the things always around us. Perhaps this is the case with our native plants. We see them so much we hardly see them at all.

Now I am no advocate for “native only.” I thoroughly enjoy the visual impact of “exotics.” Yet they would not seem so fanciful without something familiar for comparison.

Half of our three acres is thick with native plants natural to the site. The native flora harbors native fauna, which brings me no end of delight. The leaves of our Sweetgum trees (*Liquidambar styraciflua*) feed the caterpillars of Luna Moths. In autumn and winter flocks of Goldfinches feed noisily and cheerfully on the abundant seeds hidden in the spiky Sweetgum fruit. We have several Chokecherry trees (*Prunus virginiana*) whose leaves feed the caterpillars of the flashy Tiger Swallowtail butterfly, whilst the flowers feed the bees and the fruits feed the birds. We are fortunate to have several native Viburnums natural to the property, my favorite of these being *Viburnum dentatum*. Specimens in full sun blanket themselves in spring

with white blossoms, which the bees find irresistible. Later, the small black fruits are greedily gobbled and guarded by birds. In autumn the leaves take on flaming hues of gold. All of this produced from lousy soil without supplemental water or fertilizer. The natives know how to do it and are wonderful plants to set off my “exotic” Agaves, Palms, and Yuccas.



Photo by Michael Papay

Agave ovatifolia with *Viburnum dentatum* in the background,

Amongst the many native grasses on our property, my favorite has to be the majestic Indian Grass (*Sorghastrum nutans*). When set against an autumn sky, the towering spears of flowers and seeds catch the glow of evening's light in a



spectacle that stamps itself into memory. If that were not enough, Goldenrods (*Solidago sp.*) form a billowing yellow sea below from which the Indian Grass thrusts its inflorescences to the heavens. It is all a veritable feast for the eyes – and an actual feast for many a butterfly and bee.

Photo by Michael Papay

It is a great comfort to me that amongst my fellow gardeners are to be found kindred spirits who harbor a fancy for exotics - and an abiding fondness for our wonderful natives.

Life is good. ☞

A glowing Indian Grass, *Sorghastrum nutans*, peaking into the "exotic" scene and fitting in rather nicely

Changes in Chapter Plant Sales Coming September

You will recall from the Summer issue of *The Trillium*, in September we will be selling fixed-price plants that members donate, rather than auctioning them as we have done in the past. The fixed-price plant sale will replace the traditional "annual September" plant sale. Should an exceptional plant of particular merit be brought, it will be auctioned. This exception will be announced by the Plant Sales Committee.

The price of plants will be set by our Plant Sales Committee, in consultation with the donor if necessary, with prices available before the sale begins. As they say, "the decision of the judges will be final".

If you wish to donate plants, please have them at the meeting early, by 9:15 am. We hope to sell most of the plants before the actual meeting begins.

As always, we appreciate the kind donations from our members, but please remember: unusual plants, of respectable size and well presented, are most appreciated. Charlie Kidder ☞

Moss Workshop Sign-Up Open

After the November 19 presentation by "Mossin" Annie - Annie Martin – she will offer a workshop for a minimum of 10 participants, limited to 30 maximum. Participants learn to make their own moss dish garden or "moss as art" creation and will have it completed to take home. The workshop will begin at 11:30 a.m. and last one hour (*the room must be vacated for another group arriving at 1pm*). Registration is \$20 and must be made by Nov. 12. Annie will provide all mosses, native plants, decorative rocks and containers. To sign up, mail your check to Bobby Wilder, past treasurer, 2317 Elmsford Way, Raleigh, NC 27608. ☞



Ebb and Flow in Agaveland

by Michael Papay

Life is a flowing, continuous thing while it lives, ever interesting and beguiling.

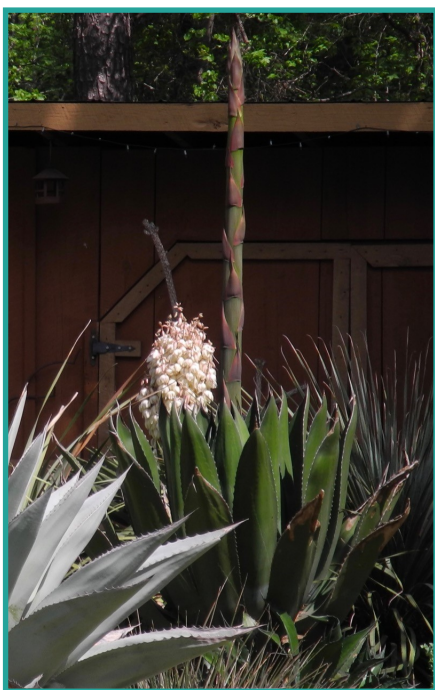
It may not, dear reader, do you any harm to learn that I am going to write about agaves. It may not do you any good either.

In 1972, after studying the agaves for nearly forty years, Howard Scott Gentry wrote, “*In Sonora, agaves are scattered like gems in an arborescent matrix.*” Ten years later his monumental tome, Agaves of Continental North America, was published, and in it his life’s work came to fruition. In it, Gentry affectionately referred to the vast natural realm of the agaves as “Agaveland”.

In northeastern Mexico, near Monterrey and Saltillo, the citizens of Agaveland have for hundreds - if not thousands - of years, selected and cultivated agaves for the essential daily, non-alcoholic, liquid refreshment

known as *aguamiel*. It is the safest source of drinking water in a realm prone to drought and polluted surface waters. After the arrival of Europeans, the knowledge of fermentation and distillation was applied to *aguamiel* to produce the potent potable *mescal*. Ever since that time the locals who produced *mescal* were called *mescaleros* and the agaves they used to do so called *mescal* agaves. The principal mescal agaves are of the Salmianae Group, about which Gentry wrote, “*The Salmianae show a high degree of Agave specialization and phylogenetically can be regarded as the most advanced or modern. Their great variability, obviously abetted by man, is part of their modern modification, a situation of unpredictable eventuation.*” Nurserymen have since fallen under the spell of the large green mescal agaves of northeastern Mexico, and selected and marketed plants from that region. In doing so they have inadvertently mixed some of us up in contemplation of that “situation of unpredictable eventuation.”

Photo by Papay



Agave 'Saltillo', Author's Garden'

Three cold hardy large green mescal agaves have come to

market known under the names 'Belville', 'Green Goblet', and 'Logan Calhoun'. I have another I call 'Saltillo'. And the JC Raulston Arboretum has another un-named cultivar that the staff have grown and bloomed there for nearly two decades. And for nearly two decades, Zac Hill and I have intently watched these agaves grow and bloom. Zac, now taxonomist at Plant Delights Nursery, has an exact memory for botanical details and nothing is lost upon him. Over the years he has accumulated evidence that these cold hardy, large green mescal agaves of northeastern Mexico do not exactly fit within the Group known as Salmianae. This year, 2016, my *Agave* 'Saltillo' bloomed, and I shared photos and flowers with Zac. He



Agave 'Green Goblet', Plant Delights Nursery

Photo by Michael Papay



concluded that ‘Saltillo’, like previous members of this assemblage, did not exactly fit in the Salmianae. Whilst I pointed out that the bracts of the bloom stalk were wide and red and slightly overlapping like those of *Agave gentryi* of the Salmianae Group, Zac observed that the flower tepals were cucullate-papillate at the apex like those of *Agave asperrima* of the Americanae Group. I pointed out that the inflorescence of ‘Saltillo’ exactly resembled Greg Starr’s photos of a specimen of *Agave gentryi* in the field. So what were we dealing with in this assemblage of hardy large green mescal agaves of northeastern Mexico? Zac Hill, Tony Avent and I contemplated on the subject.

Eventually, I recalled that young plants of *Agave gentryi* ‘Baccarat’ have scabrous leaves. This condition disappears as the plants grow in size. And I recalled that some of my seedlings of *Agave gentryi* from Jame, Mexico (kindly provided by Paul Spracklin of Oasis Designs, UK) also had scabrous leaves when young. From this I concluded that *Agave gentryi* occasionally hybridizes with *Agave asperrima*. The first piece of the puzzle seemed solved. Some of the cold hardy large green mescal agaves of northeastern Mexico are very large, such as ‘Bellville’ and ‘Logan Calhoun’. The quite large size of these selections would be explained if *Agave americana* was also involved in the hybridization. I represented this three-way combination by: *Agave* [(*gentryi* x *asperrima*) x *americana* ssp. *protamerica*] and presented it in (in email) to Zac Hill and Tony Avent.



Photo by Papay

Yucca ‘Logan Calhoun’, Plant Delights Nursery

It is a potentially prideful moment when one *thinks* he has made a discovery - even in so obscure a place as Agave taxonomy. However, no sooner than was I congratulating myself on my conclusions than my thoughts wandered wonderingly to Yucca Do Nursery’s attractive and hardy *Agave* ‘Tres Equis’.

Allow me to quote Wade Roitsch and Carl Schoenfeld as they described their discovery. “While traveling in northeastern Mexico we came across a population of *Agave* near the Tamaulipas, Nuevo Leon border that appeared to be the result of a hybrid swarm... To us, it appeared that the genes of at least three species were at play here, with populations of *Agave americana* ssp. *protamerica*, *Agave asperrima* and *Agave gentryi* all converging. Each plant could resemble one of the species but when viewed as a whole it was obvious they were of hybrid origin. One plant in particular seemed to be the most ornamental... It was the best of this hybrid conglomeration and we labeled it ‘Tres Equis’.”

Wade and Carl happened upon the solution and truth to the hardy green mesacal agaves of northeastern Mexico all those years ago. I have been catching-up ever since. Gentry did say that it was “a situation of unpredictable eventuation.” As ever he was right. Gloriously so. ☞



Photo by Ppays

Agave salminana, JC Raulston Arboretum



From the Chair

Amelia Lane

As your new chair, I thought some introduction was appropriate! I love plants and learning about them!! I have been an active volunteer at the JC Raulston Arboretum for 26 years!! That's a long time and you can do a lot of plant "learning" being around the knowledgeable people at the arboretum!!! As a member of the Piedmont chapter for many years, I enjoyed the lectures and learning from our talented local speakers as well as those from far lands. Finally, I decided to be more active in our chapter (sometimes I move slowly!!)

So here I am, excited about being your chair and hearing your ideas for our chapter. I know you all have interests, skills, knowledge, and ideas. You know – those things you say to yourself –“I wish we could visit this garden, have this workshop, learn about this rock garden topic.” I would love to hear from you, so catch me at a meeting or email me at amelia.lane@gmail.com. with your ideas and comments.

Many thanks to Charlie Kidder for all his time, effort, and service as our past chair. Through his leadership we have gotten new members, enjoyed socializing with plant enthusiasts, and contributed to a scholarship for the JCRA children's summer camp. And of course we want Charlie to remain an active part of our chapter!

Our strength lies in our members, your love of gardening and plants, and your willingness to share your knowledge and learn from others. I look forward to seeing you at our meeting on Saturday, September 17!! ☺

September 17, 2016

Michael Papay

“Cactus: More Native Than You Think”

New Hill, NC

**** No October Program ****

Thursday, November 3, 2016, 7:30 pm
(note special date and time)

Liberto Dario

NARGS Traveling Speaker

“The Botanical Paradises of Greece”

Peania, Greece

November 19, 2016*

Annie “Mossin’ Annie” Martin

“Enhancing Your Rock Garden with Year-round Green Mosses”

Pisgah Forest, NC

A moss dish garden workshop will be available after the lecture at \$20/person if we have a 10 person minimum. See page 2.

January 21, 2017

Members’ Gardens Program

Members share vignettes of their personal gardens. Contact Bobby Ward to reserve a space. Length of 7-10 minutes only is suggested.

February 11, 2017 (note special date)

Tim Alderton

“Wildflowers of Northwestern Colorado”

JC Raulston Arboretum, NCSU

March 18, 2017

Annabel Renwick

“Creating a New Ecosystem: the Development of a Piedmont Prairie”

Sarah P. Duke Gardens

Durham, NC

April 15, 2017

Matt Mattus

[President of NARGS]

Topic TBA

Worcester, MA

May 20, 2017

Spring Picnic

Garden of Helen Yoest

Raleigh, NC



Please Pass the Asparagus

by Charlie Kidder

If you trust what you read on Wikipedia, the Asparagus family (*Asparagaceae*) consists of 114 genera and about 2900 species. Of potential interest to ornamental plants gardeners are a few genera sometimes known as the woody lilies. Like the true lilies, these “woody lilies” are also monocots, but in reality they aren’t truly woody, nor are they lilies. Putting terminology aside, let’s look at one genus that can be grown easily in North Carolina.

Yuccas are perhaps the best-known genus of this group; at least one species grows wild across most of NC, and they have won acceptance in (nearly) mainstream horticulture. True, some people are totally put off by “spiky” plants—including even upright conifers—but to those with more open minds, an ever-green shrub requiring no supplemental water or pruning and sporting a bold flower spike...what’s not to like?

There are about fifty yucca species, all native to the Americas; forty-some taxa can be found at the JC Raulston Arboretum. Some of these have been planted in the last year or two, while others are much older and have no recorded date of acquisition or planting. Notwithstanding, by taking a look at these yuccas we can get a good idea of their growth rate as well as their garden suitability.

The aptly named *Yucca flaccida* has pliable leaves that are not very likely to produce an “ouch” unless you really work at it. Sometimes given the name weak-leaf yucca or hairy soapwort, it typically attains a height of only 18”-24”, not including the much taller flower stalk. It does like to run, however, so lop off the young offsets if you don’t want to create a sizable patch. Then again, this spreading tendency would be highly desirable if you want to cover a large slope. Many of the available cultivars are variegated with yellow coloration either at the edge of the leaves or in a broad stripe running down the center. Common names are ‘Golden Sword’, ‘Color Guard’, ‘Gold Heart’ or ‘Wilder’s Wonderful’, the latter honoring our own Bobby Wilder.

And speaking of names, *Yucca flaccida* is sometimes confused with *Y. filamentosa* (Adam’s Needle or Spoon-leaf yucca). I don’t intend to delve deeply into taxonomic details regarding their differences, especially



Photo by Charlie Kidder

Yucca ‘Gold Sword’

since I would probably be proven wrong within five minutes. That said, *Y. flaccida* would appear to have the more relaxed leaves, *Y. filamentosa*, the more rigid ones, especially the younger leaves at the center of the rosette. Also, *Y. filamentosa* is known for the white, thread-like filaments at the leaf margins, an ornamental feature that can be appreciated at close range. As for the confusion with *Y. flaccida*, the cultivars ‘Color Guard’ and ‘Golden Sword’ (see left) are sometimes assigned to *this* species. Don’t sweat the names. If you see it and like it, buy it.



Although the smaller non-trunked yuccas have become more common in mainstream gardening, one warning note was sounded by the Missouri Botanical Garden’s website. The yuccas increased use in fast-food restaurant landscapes might lead to a negative association for homeowners. I still stick to my “if you like it, plant it” mantra, however. Just don’t surround your variegated yuccas with red-dyed mulch.

If you’re truly adventurous—and I’m sure that many Piedmont Chapter members indeed are—you can try planting the trunked yuccas. One of the hardiest is *Yucca rostrata*, beaked yucca, a native to northern Mexico and one county in Texas. Beaked yucca can reportedly reach fifteen feet in height, and one of the older plants at the JCRA has been measured at fourteen feet. A couple of other beaked yuccas at the Arboretum have grown from one-gallon size to four feet tall in ten years. *Yucca rostrata*s typically bear light bluish-green leaves with a slight twist and are arranged in a roughly hemispherical shape at the top of the trunk. If the plants are in an open area, the leaves can flutter hypnotically in the wind.

In yet another chapter on confusing yucca species, *Y. thompsoniana* and *Y. linearifolia* are quite similar to *Y. rostrata*. The former tends to be shorter than the beaked yucca and will reportedly flower even before forming a trunk. *Yucca linearifolia* has narrower leaves, and the one at the JCRA retains additional tiers of green leaves below the main rosette. And speaking of leaves, the older ones cling to the trunks of these three species in grass-skirt fashion. If you were particularly (overly?) tidy and had a lot of time on your hands, these could be trimmed off. However, the old leaves provide some protection from direct sunlight and excessive temperature swings.

One possible issue with the trunked yuccas: Do they look “right” in the North Carolina Piedmont? True, probably not much of a problem to dedicated plant nuts, but your realtor might have a fit when it comes time to sell the house. Or if you’re lucky, you’ll have a Mediterranean style home, and the yuccas would work fine.

As for culture, yuccas generally prefer full sun and good drainage. That said, they also seem tolerant of much different conditions. Some of the older plants—20+years?—at the JCRA sit in unamended clay with a Permatill mulch. I have also grown them in clay with no apparent problem. And partial shade is okay also, although you may not get much flowering. ☞



Yucca linearifolia

Photo by Charlie Kidder



Lasting Impressions, September 10, 2016

Hypertufa Trough Workshop, 9 am-12 noon
Concrete Leaf Workshop, 1 pm-3pm

Hypertufa troughs were developed as an alternative to using stone animal watering troughs for planters. The HYPERTUFA is lighter weight, has excellent drainage, and has a stone-like appearance. A planted trough can be a garden for your special plants. Participants will mix the ingredients, construct a form, build a trough and learn to release a finished trough from its mold. Cost is \$75.00 payable to Lasting Impressions and sent to the address below.

Concrete Leaf Workshop is 2 hours and you will learn to prepare your leaf, mix the concrete ingredients and mold a leaf sculpture. Your cast leaf will have every detail of the natural leaf! It can be hung inside or outside or used in your garden as a birdbath. Cost is \$65.00 payable to Lasting Impressions and sent to the address below.

For both workshops - all materials are provided and advance registration is required.

Send your check to Lasting Impressions, 4904 Hermitage Drive, Raleigh, NC 27612. Workshops are held in our studio at 4904 Hermitage Drive.
Maximum class size is 12 persons.

Please email Beth at beth68744@bellsouth.net or call 919-217-8877 if you have questions.

Preview of Coming Attractions: Liberto/Lefteri

Eleftherios Dariotis (better known as Liberto Dario on Facebook) is a horticulturalist and botanist from Athens, Greece. He has studied plant production in Greece and completed an M.Sc. in Plant Biology from the University of California, Davis and another one in Horticulture from the University of Reading in England. He has created two private gardens in Pania, Greece which hold a large variety of Lamiaceae and other plants, traveled extensively around the world and especially in Greece's diverse habitats to see and photograph the native plants and has worked in the agricultural and environmental public sectors in Greece. He is currently leading plant tours in Greece and maintains a small bulb and seed nursery business. His plant interests include everything in the family Lamiaceae, with a special attraction to Salvias, along with a love for South African Bulbs and Mediterranean climate shrubs and perennials that he is continuously introducing and promoting in Athens' tough local gardening conditions. 🌿





NARGS Piedmont Chapter Meeting

JC Raulston Arboretum

9:30 Gathering Time & Plant Browsing
10 am Program Begins

September 17, 2016

Michael Papay

**“Cactus: More Native
Than You Think”**

Bring Goodies to Share

If your last name begins with the letters below,
please consider bringing something to share.

Sept	A—C	Jan	J—Me
Nov 3	D—Fi	Feb	Mi—P
Nov 19	Fi—H	March	R—T
		April	W—Z

BOARD OF DIRECTORS

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OTHER SIGNIFICANT POSITIONS:

Sept. Plant Sale Manager: Tim Alderton

Refreshments: Maurice Farrier

Plant Profile: *Calluna vulgaris* ‘White Lawn’

by Amelia Lane

Common name: White Lawn Heather

Family: Ericaceae

Category: Perennial shrub

Primary uses: rock garden, trough, or groundcover

Dimensions: 2” tall x 18” wide

Culture: Sun to part sun. zone 4a-7b. Needs well drained soil.

Bloom time: White blooms in July to October in Raleigh

General information: With its tiny, linear, overlapping, green leaves, it

is often mistaken for a

prostrate juniper. It is

much more interesting!!

It’s racemes of small bell-

shaped white flowers are

striking against the green

foliage. It is perfect in a

trough or other container,

making an attractive

green mat that grows at

just the right rate!! ☞



Plant Profile: *Zinnia grandiflora*

by Tim Alderton

Family: Asteraceae

Category: Subshrub

Dimensions: 4”x 15”

Bloom time: August-September

Color: bright golden yellow

For those who are a bit on the adventurous side, this little compo-
site may be something to try. *Zinnia grandiflora* is a perennial sub-

shrub growing in diffi-

cult dry well drained

sites in OK, KS, CO,

TX, NM and northern

Mexico. Where *Zinnia*

grandiflora is native, it

is commonly called

mountain or prairie zin-

nia. In its native haunts,

one finds colonies

growing in grasslands,

banks, and roadsides.

The key environmental features needed being great drainage and

sun. Plants can be grown from seed or cuttings. Site them in your

sunniest and driest places, troughs, scree, or in a well drained berm,

and you will be surprised how resilient they are. ☞

