

Rock Garden

Quarterly



Winter
2011/2012

CONTRIBUTORS

Andrew Beckman is the new Editorial Director of Timber Press. Before moving to Portland, Andrew split his time between his role working for Martha Stewart as Editorial Director and running Loomis Creek Nursery in Hudson, New York, with his partner Bob Hyland.

Mike Bone is Curator of Steppe Collections at Denver Botanic Gardens, and propagator/greenhouse manager. He has worked in the field of propagation for 17 years, at wholesale nurseries and the Gardens, focused mainly on collecting and growing plants from steppe climates around the world. Mike lives in Arvada, Colorado on a half-acre plot with rock, xeric, and vegetable gardens, and a 200-square-foot greenhouse to support those.

Lori Chips is currently Alpine Manager at Oliver Nurseries. Previously she worked as propagator for the Rock & Native Plant Gardens at NYBG. Lori's articles "Anatomy of a Cushion Plant", and "Making Portraits of Plants", appeared in the *Quarterly* in 2010 and 2011 and her illustrations were featured on the covers throughout 1999. Lori is a member of the Berkshire Chapter and many of her articles have appeared in its newsletter.

Peter George, the current President of NARGS, lives and gardens in Central Massachusetts. A member of NARGS and the Berkshire Chapter since 1996, he has benefited from the astonishing amount of gardening knowledge both in his Chapter and throughout NARGS. He is mystified that more self-described 'rock gardeners' aren't NARGS members.

Myrna Jewett, a retired scientific computer programmer, lives in semi-rural western Washington with her husband. Her favorite plants are Pacific Northwest natives, especially the little ground-hugging ones and conifers

George Newman is a member of the Fells and New England chapters of NARGS, photographing and growing plants for over sixty years. He is active in many botanical societies including the New England Botanical Club, Torrey Botanical Club, New Hampshire Orchid Society, and Southern Appalachian Botanical Society, and is a member of the 4000-foot club of the Appalachian Mountain Club.

Mark Turner is passionate about photography. His work has been published on covers and inside magazines like *Garden Design*, *American Gardener*, *Horticulture*, *Organic Gardening*, and *Birds and Blooms*. Of his numerous books, *Wildflowers of the Pacific Northwest*, coauthored with Phyllis Gustafson, is now in its fourth printing. Mark's work can be seen at www.turnerphotographics.com and www.pnwflowers.com.

Bobby Ward is a retired environmental scientist who lives in Raleigh, North Carolina. He is a past president of NARGS, currently the Society's Executive Secretary, and a member of the Piedmont Chapter. His garden and horticultural writing includes *Horticulture*, *Carolina Gardener*, and the *Rock Garden Quarterly*. Bobby is the author of several books, his most recent being *Chlorophyll in His Veins: J. C. Raulston, Horticulture Ambassador*.

Barbara Wetzel lives and gardens on six acres in Barrington Hills, Illinois. She continues to refine the development of her extensive woodland, develop new rockgardens with tufa purchased through her WI-IL chapter of NARGS, and manage her prairie.

Steve Whitesell is a longtime NARGS member and a landscape architect in New York City with a strong interest in seeing what other members have created in their home gardens. He has a small garden in Queen's as well as a larger one in upstate New York.

All illustrations are by the authors of articles unless otherwise stated.

Front cover: *Lilium superbum* with tree frog (*Hyla cinerea*) in Illinois - Barbara Wetzel

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ROCK GARDEN

Quarterly

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It's now just over a year since Timber Press got a new Editorial Director – and that's important to NARGS members. **Andrew Beckman** is going to be having a big say in just what plant and gardening books get to appear on your bookshelf, and he reflects on the changes and challenges and pleasures – personal and professional – of taking such a job



New Man at Timber Press

IT HAS BEEN a little over a year since I pulled up roots on the east coast and moved to Portland to become editorial director of Timber Press. In New York I worked during the week as the garden editor at *Martha Stewart Living*. On weekends I was co-owner, with my partner Bob Hyland, of Loomis Creek, a small retail nursery in the mid Hudson Valley of New York State. It made for long commutes and a pretty busy life, but it didn't quite prepare me for the whirlwind that the last fourteen months have been.

Many people asked me why I would want to make such a radical change at this point in my career. The answer is that moving from magazines to books has allowed me to have a greater (and I'd like to think more permanent) impact on the dissemination of horticultural information. The magazine, besides being recyclable, spoke almost exclusively to novice home gardeners, but Timber publishes everything from guides for turning kids into little gardeners to textbooks on the latest developments in

micropropagation. We address all aspects of gardening and serve everyone from beginners to advanced gardeners and horticulture professionals. I joke that there are more words on a Timber cover, front and back, than there are in an entire *Martha Stewart Living* article.

I began and continue to work in the publishing business at a time when it is experiencing some of its greatest changes and challenges. Publishers are wondering how best to present information in the Internet age. Some are even questioning the future of print books. What do these changes mean for a publisher of illustrated books like Timber Press? We firmly believe that print books have a future. Yet, simultaneously, we are exploring all the options that the Internet and digital readers are offering. Gardeners will continue to adapt to and even expect new ways of receiving information, and we at Timber are looking to meet them on every available platform.

Timber remains the largest publisher of garden books in the world, offering twenty-four to thirty new titles each year and a backlist of more than three hundred. In the past, our focus was primarily on books for advanced gardeners and professionals; in recent years, we have widened our reach to include more books for novice gardeners. Our goal is to offer books for readers in all stages of their gardening career. Plant monographs were once a significant part of the Timber program, but we have treated the best of them and the market has all but disappeared. Instead of considering books that cover a single genus, we are now pursuing a broader range of topics, often on single high-concept themes or issues: what on earth grows in dry shade, how do you start a nursery, and what doesn't a deer eat?

Speaking of which . . . My leaving the magazine world also meant closing Loomis Creek after eight years of business. The nursery itself, fenced from marauding deer, occupied just one of our twenty-five acres of hayfields, woodlots, even a mill pond. Bob and I sold annuals and perennials, shrubs and trees, seventy-five percent of which we grew ourselves, from plugs, cuttings, and seed. For the most part, we tried to offer plants that were different from the run-of-the-mill stock found at big box stores and local farmstands and garden centers, and though we were officially open only from April Fool's Day to Halloween, it was a 365-day-a-year job. Tending the greenhouses was an ongoing concern; seed starting began in January and final cleanup of stock, trial, and display beds stretched into early December. Bob also had a thriving business designing gardens and landscapes throughout the region. It was all hard work, but we enjoyed it and the people we met through it.

I did all the seed propagation for the nursery, ordering seed from a wide variety of sources. I went on tears, germinating everything I could find in a genus just to see what the plants looked like. Sometimes I hit gold, as with some species of *Lychnis* that proved to be good garden plants. And sometimes I grew plants out only to wonder why I ever paid postage for the seed. Bob took care of the cuttings, mostly tender perennials but also shrubs that were not readily available. He, too, would explore the limits of a single genus. I wonder what the new owners of our house will think of all those different willows.



A harmonious ensemble of plants, color and containers - Loomis Creek Nursery

Though we spent a lot of time and effort planting and maintaining big display borders to showcase the plants we offered, I think the part of the nursery Bob and I enjoyed the most were the stock and trial beds at the back of the site. Everything was just lined out in long rows, but we loved watching what certain plants would do and seeing big blocks of bold color. It was there we tried every tender salvia we could find and trialed plum tomatoes for a story in *Martha Stewart Living*. We also planted out

the offerings from the big branded plant lines. If a plant didn't perform after the first full season, out it went. How many new echinaceas do we need, anyway? When they do their job and test plants before offering them, the big brands cannot be faulted: but I hate it when they flood the market with dozens of similar-looking cultivars without



Loomis Creek greenhouse and pot display

making sure they are garden-worthy. It's all sizzle and no steak.

Or it was. Timber Press offered me not just a new career challenge, in interesting times, but an opportunity to create a life not tied to and



Loomis Creek Nursery sales office with green roof

defined by work. I wanted the chance to garden for the joy of it, not the business of it. But I cannot discount the lure of moving from zone 5 to zone 8. No more long, cold, snowy winters. Sure, it is a lot grayer here, but this is a true Mediterranean climate: mild, wet

winters and hot, dry summers. The plant palette is huge and diverse. I am also excited by the chance to create a new garden, more in keeping with the environment and therefore, I hope, more manageable. Our old garden kept growing, becoming larger than we could maintain by ourselves. And parts of it were dependent on supplemental water and intense grooming to keep them looking their best.

Bob is thrilled by the move to the west coast. He was at Strybing Arboretum for eight years before we met and has always wanted to return west. He knows and loves the plants out here, and while the northwest Oregon climate is not as gracious as that of San Francisco, he is looking forward to the mild winters. Bob plans on building a design business here

in Portland and is pondering starting another nursery. I have already let him know that he will be on his own with that latter venture.

The house we bought in Portland sits on two-thirds of an acre, a north-facing slope overlooking the confluence of the Willamette and Columbia rivers, with views of Mt. St. Helens and Mt. Hood, and Forest Park at our back door. The existing garden was beautifully tended but traditional, with clipped shrubs, a bed of hybrid tea roses, a cutting and vegetable garden—in short, high maintenance and thirsty for water in summer. Our intention is to create a garden more in keeping with the site and with a stronger



The new house with views to the north over the Willamette and Columbia rivers

connection to the house. A good portion of the lawn is to be replaced with sweeping shrub borders and pocket meadows. The terraced beds along the drive will be filled with alpine plants and bulbs, species that will take advantage of the quick drainage and be easily appreciated in the knee- and waist-high walls of local stone. Earlier this fall, I ordered every

species tulip I could find and have just tucked them in for some spring color.

I moved into the house in July but await Bob's November arrival before embarking upon any major renovations. I'm not sure what he has in mind for this new garden, but I see a garden comprising mostly shrubs and bulbs. I would like it to be lower maintenance than our New York garden. I want nothing that requires staking, pinching, or deadheading. It should be a place for us and our family and friends to relax, with nothing more to do than watch the sunsets color the slopes of Mount St. Helens. A friend once told me he judges the success of a garden by the number of places it has to sit and have a drink. I plan to create a garden worthy of his praise.



Bob Hyland
& Andrew Beckman (with hat)

*The Northwestern Chapter of the
North American Rock Garden Society*

Invites you to

**The NARGS 2012 Annual Meeting
and 37th Annual Western
WINTER STUDY WEEKEND**



ROADSIDE BOTANIZING

**EAST OF THE CASCADE
MOUNTAINS**

**March 9, 10, 11
2012**

At the Everett Holiday Inn Hotel

This Study Weekend will focus on an area often overlooked: the flora of Washington and Oregon east of the Cascade Mountains. Here the habitat varies from forest to shrub-steppe, and from desert to riparian ecosystems. The Columbia River winds its way through this region, providing a broad canvas of remarkable habitats and plants.

March might sound really early but **spring**
comes **early** to the *Pacific*

Northwest and with a plethora of private gardens, both large and small, there will be an abundance of treasures to see when you come to the Annual Meeting in Everett, Washington.

THE EARLY SPRING garden is one of the delights of the rock gardener's year. *Cyclamen coum* and *Adonis amurensis* will be on show in some of the private gardens open for NARGS visitors, as will *Iris unguicularis*. Hepaticas are becoming more appreciated here and can be seen in several different forms. There may still be snowdrops and early species crocuses. There are several species of trilliums that come up very early and are not often seen except in specialists' gardens. A few elegant narcissus will be in bloom and arctic forms of salix will flaunt furry buds. Larger plants, such as hellebores do well in our climate and will be dominant in a number of gardens: doubles, singles, variegated and the lovely anemone-flowered hybrids should be at peak.

Winter gardens tend to have scented shrubs and *Daphne bholua*, *Viburnum bodnantense*, *Daphne mezereum* and *Sarcococca* species all contribute to the freshness of the season. They also contribute to the presence of many bird species in this area. Hummingbirds often stay year round and enjoy the bounty of the many *Mahonia* blossoms.

Many of our gardeners donate regularly to the NARGS seed exchange and take advantage of the riches of the exchange to grow the more unusual plants. These gardeners have developed many ingenious ways to successfully grow the more difficult plants. Others have concentrated on a particular genus of plants. As a bonus, extra plants will be available at many gardens. Some of these gardeners are also talented artists and their work will also be on display.

To make it easier for you to take all this in, we have tried to cluster the fifteen open gardens. Those in the areas south and east of Seattle will be open on Friday, March 9, 2012, from 10 am to 4 pm, while those north of Seattle will be open on Monday, March 12, 2012, from 10 am to 4 pm. It will definitely be worth spending an extra day or two in our wonderful, sometimes wacky, Washington. *Barbara Flynn*.

And then there are other, more public, gardens that are worth an effort.

Two public gardens have had grants from NARGS Norman Singer Fund:

Evergreen Arboretum & Gardens in Everett and Coenosium Rock Garden in Seattle.

Evergreen Arboretum & Gardens

VISIT THE NEW Alpine Rock Garden at the Evergreen Arboretum in Everett and you might be surprised when you see the choice habitats that alpine plants luxuriate in. The Arboretum, in its effort to add to the variety of educational demonstration gardens, built a 900 square-foot sand bed on the west flank of the viewing mound. Sandy Milam was awarded a \$1500 Norman Singer Endowment grant through NARGS during the July 2006 International Interim Rock Garden conference held in Snowbird Utah.



The site was developed in conjunction with the infrastructure development of the Northwest Native Trail. Jeff Gibson artfully designed the rockwork which forms the bones of the sand bed, which essentially consists of six to twelve inches of sharp builders' sand laid on to the existing soil. A final enhancement will be a top coat layer of pea gravel. A sand bed is a simple but effective rock garden design, being a quick draining mineral substrate mimicking alpine plants homes in nature.

ore than fifty plants have been introduced into the garden including *Allium narcissiflorum*, *Aquilegia jonesii*, *Daphne arbuscula*, *Delosperma basuticum*, *Eriogonum caespitosum*, *Pelargonium endlicherianum* and *Ranunculus parnassifolius*. Going forward, one of the big challenges will be discreetly labeling so many plants in such a small space. Labeled or not this is a new and exciting space to plant hunt in and maybe even repose.
Ted Milam

Coenosium Rock Garden

IN 2001 DIANNE Fincham was awarded a \$1600 Norman Singer Endowment grant, which was used to purchase soil and sand to build raised beds for the Rock Garden at South Seattle Community College, Seattle, Washington. The completed garden was dedicated in June, 2005.

This garden was the idea of Dianne and Bob Fincham, who own Coenosium Gardens in Eatonville, Washington.

The garden was constructed by the various horticultural classes at SSCC



and serves as a living laboratory for the students. The Finchams have donated over 400 different conifers as well as many European beeches and Japanese maples. Rick Lupp, owner of Mt. Tahoma Nursery in Graham, Washington, contributed over 200 alpines for the garden and designed and planted a scree garden as part of the landscape.
Bob Fincham.

Speakers

Our knowledgeable speakers will cover all aspects of the unique flora east of the Cascade Mountains — History, Biology, Geology and Growing and Propagation.

Ted Alway

Finding and Propagating Select Central Washington Natives

Ted Alway operates Derby Canyon Natives, producing Central Washington native plants for restoration and landscaping.

derbycanyonnatives.com

Joseph Arnett

Looking for What Might Not Be There: Rare plants in the Wenatchee Mountains

Joseph Arnett is the state rare plant botanist for the Washington Natural Heritage program. The focus of his work is to study and conserve rare plants and ecosystems.

Paige Embry

Fire, Floods, and Flora: How the geologic events of the past shape the plants of the present

Paige is a geologist turned garden coach/designer as well as an instructor of horticulture. gardeningbasicseattle.com

Gwen Moore (Kelaidis)

Seed Collecting: From Bloom to Seedpot

Gwen Moore is well-known to NARGS members as the editor of the Bulletin for 11 years as well as the former co-owner of Rocky Mountain Rare Plants. She is the author of several authoritative books on rock gardening.

Truls Jensen

Blue Skies Crying in the Rain: Eastside Plants in Westside Gardens

Truls is co-owner of Wild Ginger Farm, offering a wide variety of alpines, rock garden plants, shrubs and miniature conifers, and also native plants of central Washington and the interior.

wildgingerfarm.com

Jack Nisbet

A Remarkable Garden: David Douglas and the Attraction of Rocky Ground

Jack Nisbet is the author of several works that explore the human and natural history of the Intermountain West. He has been called “one of the Northwest’s great storytellers”.

jacknisbet.com

Paul Slichter

The Unique Flora Found East of the Cascade Mountains of Oregon and Washington

Paul Slichter is a biologist and photographer who has explored much of Oregon and Washington, documenting the flora and fauna through photography.

Science.halleyhosting.com/nature/nature.htm

Registration Form



Name 1 _____

First

Last

For name tag

Name 2 _____

First

Last

For name tag

Address:

City: _____

State/Prov: _____

Zip Code: _____ Country _____

Phone: _____

E-mail _____

Please indicate here if you do not wish to have your name, address and contact information printed with the list of attendees: _____

Are you a member of NARGS, VIRAGS, or AGC-BC? Yes _____

No _____

Are you a NARGS National Officer? _____

Registration fee includes all programs, Friday evening buffet, Saturday evening banquet, and refreshments for Saturday and Sunday breaks. Event hotel registration includes a complimentary breakfast.

No registration is necessary for Saturday afternoon demonstrations. Non-registrant guests may attend the plant sale, book sale, and silent auction.

Page 1 of 2

Registration Form

continued



Registration per person:	Total
Received by February 9, 2012.....\$225 x _____	_____
Received after February 9, 2012\$255 x _____	_____
1 year NARGS family membership \$30	_____
1 year NARGS student membership \$15	_____
(If you are not a member of NARGS, VIRAGS or AGC-BC, please add a 1 year NARGS family or student membership)	
Guest—Friday banquet and evening program \$35	_____
Guest—Saturday banquet and evening program \$40	_____
Total payment enclosed	_____

Banquet Meal Choices:	Registrant 1	Registrant 2	Guest
• London Broil	_____	_____	_____
• Chicken Tarragon	_____	_____	_____
• Vegetarian (not vegan)	_____	_____	_____

List any special dietary requirement. We will ask hotel catering to make arrangements, if possible. _____

Please make check or money order payable in U.S. dollars to NARGS WWSW
 Send registration form and payment to:
Dan & Pat Montague, Registrars
647 73rd Ave NE
Olympia, WA 98506
 Confirmation will be sent to you as soon as possible. When possible, correspondence will be by e-mail.

Attractions



Plant Sales

The Pacific Northwest is well known for its excellent specialty nurseries. Enjoy shopping for hard-to-find, must-have plants offered by the many vendors at our plant sale, as well as donated plants from our chapter members.

Phytosanitary inspection will be available for visitors from outside the U.S.

Book Sales

Browse through an extensive selection of gardening books in our used book section.

Silent auction

Bid on unique and special items carefully selected to entice the most reticent shopper.

Garden Tours

Both public and private gardens will be open for your enjoyment. Tour information will be sent prior to the Winter Study Weekend for those who plan to come early or stay late to explore the area.

Demonstrations

Experts in many areas will present short demonstrations on various gardening techniques.

Plant displays

View photographs, troughs, and plants from members' collections.

Conference Site

Holiday Inn

3105 Pine Street - Everett, Wa 98201

A full service hotel including:

- Complimentary breakfast buffet
- Free wireless/wired internet
- Free parking
- Free business center

Please make reservations directly with Holiday Inn Downtown Everett

Call toll-free at 1-866-700-1188 or direct/international at 1-425-339-2000. Mention "NARGS" to receive our discounted room rate of \$99 per night.

If you have the chance there are other of places to visit round Puget Sound. Myrna Jewett points to *Whidbey Island* as one of those, with photographs from Ben Legler & Mark Turner.

A WALK FROM Ebey's Landing on Whidbey Island leads from an anthropogenic prairie to a coastal bluff backed by a coniferous forest, then drops to a salt-water lagoon and a driftwood-strewn beach. This mash-up of habitats is part of the larger mosaic of waterways, islands and low-lying mainland that emerged when the Puget lobe of the continental glacier retreated from Washington State.

On a clear day one can see across Puget Sound to the Olympic Mountains to the southwest. Behind the prairie to the east is Mt. Baker, one of a few scattered volcanic peaks in the Cascade mountain range. As the Cordilleran



Ebey's Landing with steep grassy banks, Perego's Lagoon (round the headland), prairie and coniferous forest

ice sheet repeatedly advanced and retreated from the north, it was confined by the Olympic Mountains to the west and the Cascade Range to the east. This lobe of ice, the Puget lobe, reached as far south as 160 miles from the Canadian border about 14,000 years ago, but by about 10,000 years ago the bulldozing ice sheet had vacated Puget Sound country.

The rainfall here is low for western Washington, about half that of Seattle, thanks to the rain shadow effect of the Olympic Mountains to the southwest. As moisture-laden clouds move inland from the Pacific Ocean and encounter the Olympic Mountains, they rise and cool, dumping the moisture responsible for the Olympic Rain Forest. Satellite pictures of the

cloud cover over western Washington often show a hole with Sequim on the Olympic Peninsula and central Whidbey Island visible. Winter and summer temperatures are moderated by Puget Sound, but winds can be brisk.

Northwest indigenous people began hunting at the location of Ebey's Prairie soon after the glacier retreated, as evidenced by projectile points found there. But by 2300 years ago, as they turned more to plant technology, the indigenous people were periodically burning the prairie. This kept trees and brush at bay, preserving an opening for forbs and grasses used for food, medicine and materials. Without burning, meadows in Pacific Northwest lowlands are soon invaded by Douglas fir (*Pseudotsuga menziesii*) from fringing forests. Earth ovens and charred remains of camas bulbs (both *Camassia quamash* and *C. leichtlinii*) and onions (tapertip onion, *Allium acuminatum* occurs here today) have been found here. Other plants commonly used and occurring here are nettle (*Urtica dioica*) used for medicine and cordage, and bracken fern (*Pteridium aquilinum*) used for food (the rhizomes and fiddleheads), bedding and cordage.

In 1850 Isaac Ebey became the first Euro-American to settle on Whidbey Island, claiming prairie land under the Donation Land Claim Act. Other settlers soon followed, and the prairie was converted to farmland, for which it is still used today.

The word "prairie" was used by early settlers to describe these forb- and grass-dominated lowlands even though these are not like the great expanses of tallgrass prairies of the Midwest or the shortgrass prairies of the Great Plains. The term "anthropogenic prairie" is used for openings in forested areas which result from the effort of humans. These are scattered throughout areas of low rainfall and well-drained soil on Vancouver Island, British Columbia, and in Washington, Oregon and Northern California west of the Cascade Range. The largest and most intact ones in Washington State are near Olympia in the southern part of the Puget Sound lowlands, where sand and gravel outwash was deposited by the retreating glacier. Garry oak (*Quercus garryana*) and camas (*Camassia quamash* and *C. leichtlinii*) are characteristic of Pacific coast prairie sites.

There were plans in the 1970s to develop a big chunk of Whidbey Island for waterfront homes. That this did not happen is due to a concerted effort by many individuals, organizations and governments. Ebey's Landing National Historical Reserve was authorized in 1978 to protect the rural community and its historical essence. The reserve encompasses 17,500 acres, a mixture of private, county, state and federal property. The Nature Conservancy's Robert Y. Pratt preserve, 554 acres of mature coastal forest, backs the bluff to the north of the prairie. Two historic forts are included in the National Historic Reserve, as is the nearby town of Coupeville, Washington State's second oldest town.

If late winter has been warm and dry, wildflowers begin appearing in March. However, La Niña winters, associated with warmer than average tropical sea-surface temperatures, bring moist cool weather and delayed flowering to the Pacific Northwest.

About 110 native species, in addition to many introduced ones, are



found at the prairie, forest, bluff and saltwater beach at Ebey's Landing. Native plants are used for hedgerows planted along the prairie's fencelines for wildlife habitat. In winter, these hedgerows are colorful with rose hips, white berries and evergreen leaves (Nootka rose *Rosa nutkana*, snowberry *Symphoricarpos albus*, and Oregon grape *Mahonia aquifolium*).

Wind-swept conifers front the forest above the bluff. Conifers dominate this mature forest: Douglas fir, Sitka spruce, grand fir, western hemlock and western red cedar

(*Pseudotsuga menziesii*, *Picea sitchensis*, *Abies grandis*, *Tsuga heterophylla*, *Thuja plicata*). Tall Oregon grape (*Mahonia aquifolium*) comes into bloom while it is still winter. Other evergreen shrubs and one deciduous one, all *Ericaceae*, are salal, western rhododendron, evergreen huckleberry and red huckleberry (*Gaultheria shallon*, *Rhododendron macrophyllum*, *Vaccinium ovatum* and *V. parvifolium*).

The grassy southwest-facing bluff, composed of glacier-deposited sand and gravel, dries out early in the season. Thus, most of the bloom is in the spring. There are a number of species here that are rare in western Washington, but are common in the drier part of the state east

of the Cascade Range. One of these, fragile prickly pear cactus (*Opuntia fragilis*), which grows in western Washington only in the Olympic rain shadow, appears here as low mats on the hillside. Golden Indian paintbrush (*Castilleja levisecta*), a federally threatened species, grows near the landing on a treacherous slope and at ten other prairie sites, mostly on islands in Puget Sound and Canada's Georgia Strait.

Viewed from the bluff, Perego's Lagoon appears to be enclosed by a ribbon of beach floating in the sea. The shoreline has separated from the base of the bluff, enclosing a saltwater lagoon between the hillside and the barrier beach. Feeder bluffs, with a steep angle of repose, supply sediment which is carried along the shoreline by currents and deposited to become



Opuntia fragilis at Ebey's Landing [Ben Legler]

Opposite: *Abronia latifolia* - yellow sand verbena at Ebey's Landing. [Ben Legler]

a barrier between the lagoon and sea. Perego's Lagoon is a fine place to observe shore and marine birds.

One can walk a 2.5 mile loop starting from Ebey's Landing, with steps easing the climb to the top of the 250 foot bluff, then a path continuing along the bluff until the trail drops down to the far end of the coastal lagoon. The trail then returns along the water, first skirting the outside of the lagoon, then continuing along the beach to Ebey's Landing. For a shorter walk, one can skip the descent to the lagoon and shoreline, returning along the bluff.

One way to travel to Ebey's Landing when attending the meeting in



Castilleja levisecta flowering at the very end of May on the very steep grassy bank

Everett is to take the Mukilteo-Clinton Ferry, which is a 20-minute drive from the conference site. The ferry ride is 20 minutes, and the drive to central Whidbey Island is about 30 miles. There are two other ways to get on and off the island, and these suggest other possibilities for those who can extend their exploration of Puget Sound country another day.

One way to return to the mainland from Whidbey Island is to take a second but less-frequent ferry which links Whidbey Island to Port Townsend and the Hood Canal region of the Olympic Peninsula. Here there

Make a Vacation out of the trip!



The Puget Sound basin is defined by water and mountains and contains stunning scenery and bustling cities. The Columbia River Gorge, the Vantage area and Gingko Petrified Forest east of the Cascades, Puget Sound beaches, and the San Juan Islands, all provide excellent hiking.

Train service is a convenient two blocks from the hotel, giving easy access to Seattle, Portland and Vancouver, B.C. Scenic ferry service from Seattle or Anacortes takes you to Victoria, B.C. or the San Juan Islands. From the bustling Pike Place Market to the Ballard Locks, Seattle provides gardens, museums, galleries, shopping, music, micro-breweries...

Closer to Everett there are flocks of snow geese and swans wintering in the Skagit Valley, beautiful Deception Pass State Park, wineries to tour, and outlet malls. In Everett itself, there are numerous restaurants, pubs, and shops.



Everett's Evergreen Arboretum and Gardens include a rock garden, northwest natives garden, conifer garden, woodland garden, perennial border and more.

Specialty nurseries abound. One could spend months touring nurseries here and still not exhaust the possibilities. At www.specialtynurseries.com you can find listings for a day of nursery nirvana.

Whale watching tours for gray whales begin in early March from Anacortes. See www.seattle.gov/html/visitor/whales.htm for more information.

The Everett Events Center Conference Center houses the Pilchuck Glass Collection and the Shack Art Center showcases glass blowing. The downtown sculpture walk offers a display of public art.

The Future of Flight Tour at Boeing Everett and the Museum of Flight Restoration Center at Paine Field will fascinate aviation buffs.

The nearby town of Snohomish offers antique shopping. The Tulalip Resort Casino, also nearby, is located next to shopping outlets.

**The NW Chapter website has additional information on the
Winter Study Weekend at: www.nargsnw.org**

**Or contact Ilse Burch at:
Mail4IlseB@gmail.com
Or call 425-681-9341**

**Dan & Pat Montague, Registrars
647 73rd Ave NE
Olympia, WA 98506
360-709-0866
<WSW2012@comcast.net>**

are some fine specialty nurseries open to visitors by appointment.

The attractive second (alternative) way is to take the dramatic Deception Pass Bridge which connects the north end of Whidbey Island to Fidalgo Island which is in turn connected to the mainland by a short bridge. Deception Pass State Park offers numerous trails and excellent early season wildflowers. With thin soils, open slopes facing south and west are some of the earliest places where wildflowers are to be found in bloom, although it is always impossible to know which will be in flower in early March. *Juniperus maritima*, a recently described species, is found at one location in the park in addition to other sites near Puget Sound and the Strait of Georgia.

Returning from Deception Pass to the Everett-Seattle area, one can visit the popular town of La Conner, home of the Skagit Valley Tulip Festival in April. The Skagit Valley also serves as wintering grounds for tens of thousands of snow geese, as well as sizable flocks of swans, both trumpeter and tundra.

Puget Sound country, a tapestry of land and water shaped by recent glaciation, presents a variety of habitats for early season exploration of its flora and fauna. Its coastal areas include shoreline, fresh and salt water, forest, farmland and prairies, plus stunning views to boot.

Mark Turner is a professional photographer based in Bellingham, Washington whose photographs are familiar to many from his work with Phyllis Gustafson on *Wildflowers of the Pacific Northwest*. Over the next five pages a selection of Mark's great pictures point to **Deception Pass State Park** as another great place to look for wildflowers. All the plants were photographed in the State Park, and all were taken in March, although flowering time varies with the year.

Castilleja hispida below Deception Pass Bridge, March 20, 2010









Arbutus menziesii (Pacific madrone), March 15, 2008

Olsynium douglasii (grass widow) and *Sedum spathulifolium* (Pacific sedum),
March 15, 2008





Claytonia exigua subsp. *exigua* (pale montia), March 15, 2008

Collinsia parviflora (small-flowered blue-eyed Mary), March 20, 2010

You can see more of Mark's photographs
at www.pnflowers.com and he has a blog
at www.turnerphotographics.com/blog

Rock Gardening from Scratch

Propagation for Rock Gardeners

MIKE BONE

PROPAGATION IS OFTEN considered to be a mystery or some sort of alchemic doctrine held secret by a few trained professionals who have devoted themselves to the art. Creating life, germinating seed, rooting cuttings, grafting, and tissue culturing are only for the diligent and patient person who locks their secrets away in hidden tomes securing their rites and trapping them in far away greenhouses. This simply is not true. The fact is that most of us who propagate and grow plants are simply flying by the seat of our pants hoping to provide just the right combination of materials, environment, and resources to make more of something that we love.

There are no perfect recipes to make plants grow. There are many things to consider as you go about making more plants. To be a good propagator I believe that you need to have a little obsessive compulsive disorder as well as the need to be a control freak. Controlling the environment that you grow in, controlling the water and nutrition that these little plants need is the difference between being successful and endless frustration and failure.

During this series we'll look at the things we can control and why they are important.

Whenever I begin to discuss propagation I like to start by defining and explaining what needs to be controlled. This includes not only the facilities but also growing media, light, temperature, water, and fertilizer. One important thing to keep in mind is that you really don't need a state-of-the-art greenhouse complex or fancy and expensive equipment. What you need is a little understanding of how created environments affect all the other aspects of your propagation environment. A realistic expectation of the outcomes you hope to achieve is also paramount. Let's redefine success as simply getting our little propagules to do something besides rot and die. Germinating seed is simply having the radical emerge from the seed. Rooting a cutting is the emergence of root from a stem. Propagation is not growing things on until they are planted in the garden or field. That is an entirely different science and art all unto its own. Now that we have established some meaningful parameters let's talk

Seeds

For seeds you will need to consider some of the mechanisms that seeds need to overcome before they germinate. The first and most important thing that seeds need is water. Without it seeds will never do anything other than sit there and wait. So make sure that you can provide the moisture that is needed. I prefer to water seed trays by hand. I don't often trust misting or irrigation systems. Watering cans that have very fine holes providing gentle watering are ideal. Even squirt bottles with adjustable sprays work well for watering seedlings. One clever way to water seed pots or trays is with subirrigation. I have used plates, tea cup saucers, plastic sweater boxes: anything that holds enough water to submerge the bottom half, or less, of your container for a few minutes is great. By subirrigating you don't have to worry about washing tiny little seeds out of the container.

Cuttings

For cuttings the most important thing is also water. When dealing with cuttings you will need to be even more critical of how water is applied, how it stays around and what part of the plant you would like that water to get to, even what time of day you want water on certain parts of the plant. Consider the fact that when you have taken a cutting you have severed that little plant's means of retaining and getting water. It is now up to you to keep the turgor pressure up in the plant. Leafy plants lose water through the stomata on the underside of the leaves. These stomata open and close based on relative humidity in their proximity. High levels keep them closed and low levels force them open to draw water up from the roots using capillary action and evapo-transpiration. To do this you need to keep a thin coat of water on the leaves during the day. But if that water remains for too long, or is coating the leaf surface during the night, it allows a perfect set of conditions for disease pathogens to establish. Soil moisture is also more critical when rooting cuttings. To be more precise the balance of air space and available water is what we are really talking about. This is greatly influenced by your choice of media and container.

more about some starting points.

The greenhouse can be a massive structure that covers acres in polycarbonate, with robots, conveyors, computers, and very fancy people in lab coats holding clipboards. It can also be as simple as a plastic bag covering a tray or a pot to capture humidity and heat. Some of the most effective greenhouses are simple cold frames that extend your season into the fall or give you a couple of weeks jumpstart in the spring. Coverings can be glass, clear plastics, or any material that allows light and solar radiation through and mediates humidity by either excluding water from entering or trapping it inside. If you are starting seed you will want to consider a different set of variables than if you are trying to root cuttings.

Perched Water Table

The perched water table is simply the zone of saturation that exists in every container. I recently attended a lecture given by a representative from one of the Canadian peat moss growing media manufacturers: the main theme of his lecture was helping people understand perched water tables. Understanding the perched water table gives you the basis to make a lot of very important decisions that influence every other aspect of creating a propagating and growing environment – water and its control are vital to both seeds and cuttings. There is a great mass of university research surrounding this topic. Container manufacturers spend endless amounts of time and energy trying to control the perched

water table. All the greenhouse and propagation text books address this phenomenon as well.

The perched water table, the zone of saturation, is always at the bottom of the container and it is always there. The depth at which the perched water table is found below the surface of the pot is relative to the depth of the container, but equally important is the choice of the growing medium.

Inside of the perched water table there is no air space – all the airspaces are filled with water. The roots of plants need oxygen and air space to live. Inside of the perched water table normal respiration is impossible. What is created there is anaerobic respiration one by-product of which is alcohol. While super important to those of us who enjoy a glass of whisky or a bottle of wine it is certain death to the root system we are so diligently trying to nurture.

One myth surrounding the control of the perched water table is that if you fill the bottom of the container with very porous grit or gravel you eliminate it. Not true. All you have done is move the perched water table closer to the top of the container and decreased the volume of space you have to grow a healthy root system.

Another myth is that if you use a skinny tall container you minimize it. Skinny containers actually make the perched water table deeper. So knowing it exists is the first way of dealing with it. Don't fret, or obsess over trying to get rid of it but do remember that it is there and it will always be there. Learn to manage it

and don't let it get the best of you or your propagules. One of the best ways to alleviate the problem is to water thoroughly but then allow the medium dry out well in-between waterings.

When you water less frequently you allow the perched water table to dry out. A note of caution here: if you let the media dry out too much you run the risk of taking seedlings to the terminal wilting point and killing them. Watering is a very delicate balancing act, but with practice and a keen eye on your environment you will quickly master it. Another benefit to letting pots dry out between waterings is that you reduce the potential for fungal and bacterial infections.

There are some propagators who are using capillary mats in a very innovative way. By placing the mat so that a portion of it is at an elevation higher than the edge

of the container you can wick the water out of the bottom of your container mostly eliminating the perched water table. I have seen this done successfully by growers who specialize in dryland native plants. A favorite mantra of mine is that there is no such thing as over-watering, there is only watering too frequently. Think about it. A drinking glass can only hold a very specific volume of water. If it is full can you add more water to it? No, you simply replace the existing volume with a new and equal amount. Therefore in a container you need to make sure that the plant is using the water and that it is evaporating out before you add more.

Understanding some of these concepts will help you create and manage your propagation environment.

Next time, when I discuss cuttings, I will go into your options of media types. I will tell you some simple and creative ways to manipulate space you already have (and can make) to root cuttings. I will discuss different types of cuttings and the timing of taking and rooting cuttings. We will delve into the stages of rooting, chemical influence on root initiation, de-differentiation and re-differentiation of meristems. There will also be some discussion on fertility: what, how and when. In future articles you can look forward to lengthy diatribes on seed. You can believe me now that I have some opinions on that as well.

Look out. Propagation is the beginning of all horticulture and gardening. Anyone can do it, anyone can master it. Remember, that it is specific to the materials you have and the environments that you can create. The only mystery is why more people don't do it. However if everyone became an expert propagator what need would you have for people like me? A chilling thought.



The golden tones of a stand-out *Robinia* [Mark Binder]

the Highberg Garden - 1

PETER GEORGE

— a perfect plan

for a perfect Vermont garden.

I've never been a fan of books whose titles begin with the words "Principles of..." Nor do I care for articles, lectures and DVDs that offer a paint-by-numbers template for how to do pretty much anything. I am by nature a freelancer, using my imagination to create what pleases me and hoping that it will please others as well. So when I started gardening seriously in 1996 I ignored the "principles" that were ubiquitous in Borders garden section, Horticulture Magazine, and various other well-intended instructional materials. I wanted to try to understand for myself what this gardening thing was all about.

So I have a tremendous appreciation for other gardeners who have ignored "principles" and followed their own vision to create gardens not just worthy of respect, but of awe. One such is Patsy Highberg's garden near Woodstock, Vermont, which I recently had the opportunity to visit.



The *Sempervivum* path [Mark Binder]

Patsy's garden was one of the destinations offered to us at the 2011 NARGS Annual Meeting in New London, New Hampshire. I have known Patsy casually since the 90s, since she's a member of the Berkshire Chapter (among others). Nevertheless, when I drove up to her gate I was totally unprepared for the breathtaking garden I was about to explore. Steve Whitesell, a talented landscape architect, has written an illuminating article about the garden, the house and the terrain. His words and pictures, allied to the photographs of Mark Binder,



Portrait of Patsy Highberg [Mark Binder]

provide a detailed and insightful look at a Patsy's garden (although, like many outstanding gardens, it defies snapshots and really needs time and changing seasons to fully reveal its subtle beauty and sheer brilliance). What follows are my own impressions, as a gardener, of this extraordinary place.

After a brief walk around Patsy's house, which is surrounded by lovely plantings, I wandered down along a path that brought me into the rock garden. Steve Whitesell's and Mark Binder's photographs effectively illustrate this part of the garden, but photos can't show what surprised me most – the seamless transition into and out of this beautifully designed and maintained collection of rock garden plants. I've always felt that if one tries to combine a quick draining slope of rocks and rock plants with a woodland garden, water features and an arboretum, the challenge is the transition from one to the next. I've never been able to create a satisfactory transition, let alone an elegant one; and even in public gardens it's almost always too sudden, as rock and gravel and sand segue abruptly to woodchips and moss. Patsy and her partner/gardeners have been exceptionally successful in meeting this challenge, allowing visitors to almost unconsciously find themselves in a wholly new place without noticing the transition at all.

From the rock garden, I was transported to paths that took me through woodland populated with perfectly positioned trees, rare and

beautiful understory plantings, and every few feet a specimen or two that most of us have failed to grow successfully, but here look just like they do in the books! Walking along a descending path with Jacques Mommens, I was repeatedly startled by his exclamations (he was almost shouting) over some rare and wonderful woodland plant that was flourishing here in Vermont, while he couldn't keep it for more than a year or two in New York, and even for that brief time it never looked comfortable. In Patsy's garden it was at home, accompanied by hundreds, perhaps thousands, of other choice plants, all of them looking like they had evolved to live right there in Vermont.

After spending a couple of hours (not nearly enough time to explore such a masterpiece) walking along the paths, around the house and back into the woods, I had the opportunity to spend a few minutes with Patsy. Interestingly, out of all the life and beauty that she has created with her vision, time and sweat over 30 plus years, the one thing she couldn't stop talking about was her *Lewisia tweedyi*. She had a few in the last stages of bloom, all of them impressively robust, looking just like they do in the Siskiyou. They were and are her joys, and I overheard her offering every visitor an opportunity to get a look at them!

I visited Patsy again a few weeks later, not only to get another look at her garden, but to have a longer conversation with her about how this incredible garden came to be, and I was delighted to learn that she,

Rock garden scene with *Thuja occidentalis* 'Degroot's Spire' [Mark Binder]





Rock garden pool waterfall - part of the recirculating water system [Mark Binder]
Conifers and saxifages [Mark Binder]



too, is one of those gardeners who pay little attention to “principles.” By carefully evaluating her substantial acreage, working with the land, and factoring in climate and her personal preferences, she has created something not copied from a blueprint, but rather arising organically from a perfect confluence of imagination and serendipity. As Patsy has written, “The only way I can discuss the evolution of my garden is sequentially. As one part was planted or changed it inevitably led to an idea for a different choice of plant material for that area. Then the new garden affected my ideas and thoughts about how the whole related to the new.” A perfect plan for a perfect garden.

the Highberg Garden - 2

STEVE WHITESELL

— where large scale vision combines with intimate detail.

The garden of Patsy and Paul Highberg, developed over the last four decades, displays a visual and thematic clarity unusual in so ambitious and extensive an undertaking. The majority of the garden, whose cultivated areas occupy approximately three acres, descends in a series of terraces and ramped paths from the south façade of the house. Views from windows and doors are carefully planned to focus on notable specimens, collections, special site features, or view corridors.

Arriving at the house, visitors first encounter a gravel entrance court encircling a large stand of preserved forest trees, a series of rustic storage buildings, an enclosed vegetable and cutting garden in a clearing beyond, and a large, handsome stone trough and copper wall fountain that direct visitors to the main entrance. Near the house, tender plants are displayed in pots and containers, with special attention paid to color and textural contrasts. Architectural details, like fanciful corbels hanging from eaves, enliven the spaces, but the real attraction is the extensive assemblage of plants.

Collections are meticulously, but unobtrusively labeled. A collection of *Sempervivum* species and cultivars near the house occupies a bank above the path, each group carefully separated by narrow bands of gravel mulch. Trees and shrubs are all carefully and skillfully pruned by Eric Johnson and Elaine Gambone, along with Betsy Rhodes and Mark Binder, to promote healthy growth and display each plant's individual branch structure, an enormous undertaking in such a complex garden, but very much in evidence the day of the Annual Meeting visit.

Woodland beds are carefully mulched with shredded leaves, and the contrast with the shredded bark paths provides a clear delineation between circulation routes and planting, signaling the distinction to visitors. Particular emphasis is placed on large-leaved plants and there are large drifts of *Rodgersia* and *Ligularia* species and cultivars, *Astilboides tabularis*, *Aralia cachemirica*, *Diphylleia cymosa* and *D. grayi*, and other dramatic foliage plants displayed in drifts along the paths. Asian woodland plants are cleverly interplanted with their American adjuncts, gradually phasing into exclusively American woodlanders that merge seamlessly with the surrounding native flora as garden becomes forest, although to protect against predation the whole garden is surrounded by deer fencing.



Part of the gravel terrace with troughs below the house [Steve Whitesell]

Carefully composed vignettes reveal themselves as one follows the paths and the garden unfolds in episodic fashion. A spare, shaded gravel terrace displays a small collection of troughs, surrounded by low, judiciously planted, stone walls. A large dark boulder in another graveled forest clearing overflows with water issuing from an unseen source, mysterious and calm.

Thoughtfully sited sculptural embellishments are seen from a distance or stumbled upon, and a simple rectangular swimming pool occupies a small clearing below the house, but is screened from direct view. The plantings have reached a state of abundant maturity fostered by careful attention to soil enhancement, but the owners continue to add and experiment with new additions. In spite of this constant work, the garden avoids the piecemeal additive feeling one finds in many gardens

developed over a lifetime of learning and experimentation. Whether the result of rigorous restraint or careful pre-planning, the end product is notable and welcoming.

A simple stone slab fords a seasonal freshet planted with moisture-loving plants, and a length of heavy chain supported at each end by massive waist-high stone pillars prevents distracted visitors from stepping off the slab. Several large boulders were moved into place by heavy equipment during the laborious construction of the house and garden, but their wounds are fully healed and the overall effect is of stillness, pleasing proportion, and fulsome Nature triumphantly erasing all evidence of the enormous effort expended in the garden's creation.

Several individuals contributed to the creation of the garden over the decades, but the dominant hand and vision belong to Patsy. The first project was construction of the house, a large single-story structure with



Massive stone columns and chain by path edge [Steve Whitesell]

radiating wings, discreetly clad in dove-gray vertical cedar planks. A local landscape architect, Robert F. (Biff) Longfield, was enlisted to help site the house and plan terraces incorporating rock blasted out during construction of the foundation. Working with a mason, John Barnes, several level areas were created and soil was packed between the stones and planted, though this work predates the owners' involvement with rock gardening. The genesis of that future obsession was the discovery of the Siskiyou Nursery catalog, recommended by a gardening friend.

A 1986 trip to the International Rock Garden Conference in Boulder, Colorado also helped establish rock gardening as a significant focus of future garden development. The following year Patsy and Kate Reeves, who collaborated with her on the garden for 28 years, visited the Massachusetts garden of Joan and Bob Means and admired the recirculating stream and water features. They created their own stream in Vermont incorporating the Means' method of placing butyl rubber



Detail of pool garden [Steve Whitesell]

sheeting over recycled carpet, though the carpet was later removed after the rubber developed several small tears and was replaced with a thicker layer of butyl rubber that has held up well.

Additional advice on planting and design was provided by Joe Eck and Gordon Hayward, who returned several times after his initial consultation in 1997. Julie Messervy consulted on the stone entrance walk and Dimitri Gerakis was the blacksmith who fabricated the distinctive ironwork in the garden, including the archway and vehicular gate.

A tufa wall was added in 1998 against a portion of exposed foundation on the east side of the house. The house was expanded the same year, a vine-embowered pergola was added to the south façade to visually reduce the height and mass of the house, and 22 new windows provided vantage over the expanded garden. The following year Patsy and Kate removed a number of the original overgrown shrubs to open views down the hill. A number of large rocks were placed and Patsy

credits John Barnes for his artistry in rock placement, as well as fabrication of the large stone trough near the main entrance. Succeeding Kate, Betsy Rhodes and Mark Binder have been essential to the garden's recent evolution.

Change is a constant in any garden and the future could continue to hold planned and unforeseen alterations and additions to the Highberg garden.

Lucky visitors in June 2011 were fortunate to observe a moment of near-perfection in the life of this undertaking.



Detail of the Sempervivum Bed [Steve Whitesell]

Thornapple Gate in fall [Mark Binder]



The Highberg Garden is open annually on scheduled days through the Garden Conservancy for those who may have been unable to attend the NARGS meeting and those who want to return.

A photograph of a prairie field filled with numerous yellow Black-eyed Susans. The flowers have bright yellow petals and dark brown centers. The plants are tall and thin, with green foliage. The background is a soft-focus field of similar flowers, creating a sense of depth. The overall scene is vibrant and natural.

A prairie in Illinois

BARBARA WETZEL





The joyful abundance of the prairie garden in summer

IT IS SUCH an amazing sight to watch our prairie emerge in the spring from the bare newly-burned ground, transforming itself gradually but completely into a lovely and distinctive tall-grass prairie by summer's end. As we walk around it in the fall, the birds flit here and there, collecting their bounty of food from the season's harvest.

Our 6-acre property, purchased 20 years ago, was originally part of a large farm. It was covered primarily with large oak trees (red, burr,



white, black and Hill's), large wild cherry and hickory trees, and thickly interspersed with buckthorn. It had previously been the wood lot for the farm where the cattle grazed and wandered in the shade. Initially our efforts were spent in the woodland. Several winters were spent cutting down about 1500 buckthorn and chemically treating the trunks to prevent their resprouting. Then, a continuing battle with garlic mustard and the transition into, in part, a native plant woodland began.

The acre and a half to the rear of our property was farmed for many years along with the properties adjacent to ours. This area was so atypical of the majority of our property that it was the last parcel with which I concerned myself. It was covered mostly with scruffy turf ringed by an assortment of spruce, pine, cherry, poplar and more buckthorn trees. The center of this area contained a large group of trees which were mostly wild cherries and more buckthorn around a center grouping of four mature weeping willows.

After several years we attacked the grouping of buckthorn and wild cherries in the center of this section and discovered a wonderful black oak which was happy to be relieved of its invasive neighbors. The weeping willows never were favorites and were removed.

At first a significant portion of the area in the center of the 1½ acres was rototilled and a vegetable garden started. Raspberry plants and asparagus were planted along with the traditional garden vegetables. Moderation has long been one of my problems. So the vegetable garden had 30 bean towers, 20 tomato plants,

6 rows of corn, peas, bush beans, green pepper plants, various lettuces and 8 zucchini vines (which despite my best efforts at picking them, often produced zucchinis which could be carved out and used to float down the Mississippi). It became an overwhelming chore to pick, preserve, distribute to friends and at last eat the harvest from this garden.

As a volunteer with a wetland restoration group at the Morton Arboretum, and a volunteer with a woodland restoration group at the Chicago Botanic Garden (CBG) I began to think about alternative ways



Amorpha canescens

to develop this area. Many of the members of our restoration group at the CBG were also involved with the prairie restoration efforts. Both groups had nurseries for propagating endangered species of plants to be used for our restoration efforts. All of the seed for their propagation was collected within a 25 mile radius of the CBG for propagation.

After viewing the annual burning of the Schulenberg Prairie at the Morton Arboretum and then visiting Ray Schulenberg's private prairie at his home I began to think about starting a prairie of my own. After much trial and numerous errors, I decided to put the prairie in the center of this section of our property, surround it with a grass line, which varies from 8 to 15 feet wide, to facilitate its burning, and then surround the grass line with perennial beds. They are in large part made up of native plants, some of which have seeded in from the prairie. Our soil is mildly acidic with a pH which is on the average about 6. We are very fortunate that the soil in this area is partly mesic to wet-mesic. The



Turk's-cap lily (*Lilium superbum*)

Goldenrod and asters









Lilium superbum among the prairie grasses

result of the farming was a soil that was somewhat degraded although sufficient for the establishment of a prairie.

I have long had an indoor lighting system that was especially useful when I began to order and grow seeds from nearby native plant nurseries. In addition I began to collect seed as I walked in native areas. In the first years anywhere from 2000 to 3000 plants a year were planted. They were grown to 3–4 inch seedlings under the lights, hardened off in a protected area, then planted. The plantings were timed to coincide with forecasted rains. Almost no water was provided even when they were first planted, and none was ever provided afterwards. A few plants were ordered from native plant nurseries. Among these were two native wild indigos *Baptisia leucophaea* (*B. bracteata* var. *leucophaea*) and *B. leucantha* (*B. alba* var. *macrophylla*). When they arrived they were bare root, scarcely three inches long and mostly root. Surprisingly they all survived and remain where I planted them even today. They are a particular joy to me as they bloom and then produce their attractive seedpods. I am especially fond of *Baptisia leucophaea*, so much so that a grouping of them has been planted in one of my shrub borders.

As a volunteer at the CBG I worked with the woodland restoration group which also included many people who were involved with the



Monarda fistulosa

Senna (Cassia) hebecarpa



Asclepias tuberosa



Asclepias verticillata

Rudbeckia triloba

prairie restoration efforts there. These groups in the summer worked in the nurseries where native plants for the woodland and prairie were grown. Late in the summer and fall, we collected the seed, dried it, separated it from the chaff, and then distributed it in the CBG woodland and prairie or distributed it to other restoration groups when we had sufficient





quantities of some species for our purposes. I used to collect the chaff after cleaning the seed, put it in large bags and then bring it home to distribute in my woodland and on my prairie. From this many native plants were acquired, including *Lobelia cardinalis* in my lower woodland (which has reseeded generously and has begun to spread to other areas of my garden), various asters, solidagos, and various and sundry grasses and forbs. Lest I forget, some plants have been introduced by birds and other critters: a population of *Lobelia siphilitica* (both white and blue), *Asclepias tuberosa*, *Agastache foeniculum*, *Asclepias verticillata* and others.

Propagation of plants from seeds continued for some five years until the area was filled. Some plants were also given to me by the staff at the CBG and that added more diversity. It was surprising how well all the plants did even without any watering other than that which occurred naturally.

In a dry year the prairie is 4–4½ feet at its tallest while in a year such as 2010 when there was a continual abundance of rain, it reaches 7–8 feet tall. One year that was particularly dry, not only were the prairie plants short, but even the petals on the echinaceas were just one third of their normal length.

The prairie itself is now about 12 years old and occupies an area of approximately three quarters of an acre. It has been fascinating to see its growth and transition over these years. Some of the plants have totally relocated themselves to other areas of the prairie to what I presume are more preferable sites. Some have reseeded generally over much of the prairie and others have stayed right where they were first planted. It is a wonderful mixture of grasses, many tall, and a wonderful assortment of forbs. For many years I did most of the work by myself, but more recently I have been helped by a part-time gardener (who has now after ten years moved to Indiana to operate a family restaurant) who knew little about plants when he first started here. His first job was to remove all of the Queen Anne's lace, then the thistles. Together we worked, removing weeds, brambles and unwanted tree seedlings and then annually burning the prairie.

The burn is done each spring, weather permitting, as soon as the grass surrounding it is green and can be mowed down close to remove any brown duff which could enable the fire to leapfrog to other areas. However, in recent years the grass has been so wet that the fire was easily constrained. It is amazing that, even immediately after the fire has passed, that the ground remains cold to the touch. Each year the burn proceeds more rapidly as the prairie continues to mature.

Since the prairie is burned in the spring, usually in April, but occasionally in March, it begins each season with a clean palette. Each day brings a slight but perceptible and enjoyable transition. It also



Skunk family

Echinacea pallida





Lupinus perennis





Ratibida pinnata

Cacalia muhlenbergii



changes noticeably from year to year with the grasses and forbs moving around as they find locations where they can prosper. It is fascinating to see this annual movement.

Our prairie is now home to some 130 species of grasses, *Carex*, and forbs. The grasses are primarily *Andropogon gerardii* (big blue stem), *Schizachyrium scoparium* (little blue stem), *Sporobolus heterolepis* (prairie dropseed), *Elymus canadensis* (Canada wild rye), *Bouteloua curtipendula* (side oats gamma), *Panicum virgatum* (switch grass), *Spartina pectinata* (prairie cord grass), and *Sorghastrum nutans* (Indian Grass).

Lespedeza capitata - bush clover - in seed among tall grasses





Echinacea tenesseeensis



Liatris pycnostachya
- prairie blazing star



Ceanothus americanus



Solidago speciosa



*Veronicastrum
virginicum*



Vernonia altissima in seed

The plant list is quite diverse and includes many asters, solidagos, baptisias, and others. I seldom add new species although I will try to add some of the gentians in the coming years. One of the most difficult plants to establish was the common milkweed (*Asclepias syriaca*) which only last year finally took hold and this year produced seed pods for the first time.

Some of my favorite forbs are *Amorpha canescens* (lead plant), *Asclepias tuberosa* (butterfly weed), all of the asters, *Baptisia leucophaea* (cream wild indigo), *Cacalia muhlenbergii* (Great Indian plaintain), *Ceanothus americanus* (New Jersey tea), the daleas (prairie clovers), *Dodecatheon meadia* (shooting star), *Lilium superbum* (Turk's-cap lily), *Melanthium virginicum* (bunch flower), *Phlox glaberrima* (marsh phlox), *Rudbeckia triloba*, *Solidago speciosa* (showy goldenrod), *Verbena hastata* (blue vervain), and *Veronicastrum virginicum* (Culver's root). The *Cacalia* towers above all others and is so majestic. This was the first year that the *Dodecatheon* really bloomed and made a significant presence on the prairie. They grew from seed I scattered several years ago after collecting them on a hike. I have loved the *Melanthium* since I first saw them bloom. The plants are larger each year. It has not reseeded but remains where it was planted. I collected some seed this year and plan to add more plants of this next year.

It is also home to butterflies, moths, dragonflies, bees, mosquitoes, numerous other insects I have yet to identify, tree frogs, an assortment of toads, an occasional brown snake, an amazing number of birds who love to feast on the seeds produced throughout the summer, fall and winter, and finally a woodchuck condominium in the center. Once, early in the year, while walking through the prairie after it had been burned, I heard the sounds of some of their babies from their underground burrow.

It has been home to bluebirds who finally began to use bird houses put out for them. We watched one fledge her babies several years ago. Red tail hawks, downy and hairy woodpeckers, blue jays, chickadees, wrens, robins, sparrows, hummingbirds and goldfinches are also often seen around the prairie. We also have a resident fox which lives here sometimes in the winter, raises her young and wanders in and out. She and her offspring enjoy picking and eating our raspberries. It is also a favorite area of my husband and our pets, two dogs and two cats.

The prairie continues to delight us with its unique texture and character. It is amazing how much it changes all on its own from year to year. It is a constant source of interest as we walk around it each evening with our pets. There is nothing more beautiful than seeing the grasses and the flowers on the forbs set aglow by the sun from the west as it lowers in the evening sky. It's fall now, and as I walk around our prairie, the birds flitter here and there snacking on the fall bounty of the



Autumn color - *Senna* in fall

season's produce. The dragonflies, butterflies, moths, and thankfully the Japanese beetles and mosquitoes are now gone for this season. It is alight once again with the lovely fall coloring of the grasses and forbs, with some forbs still offering their color with fading flowers.

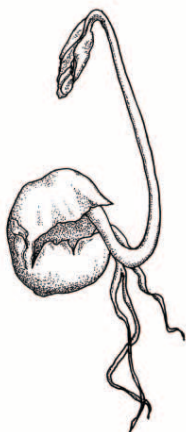
Seed Crimes

or

The Many Accepted Ways We Torture Seed

LORI CHIPS

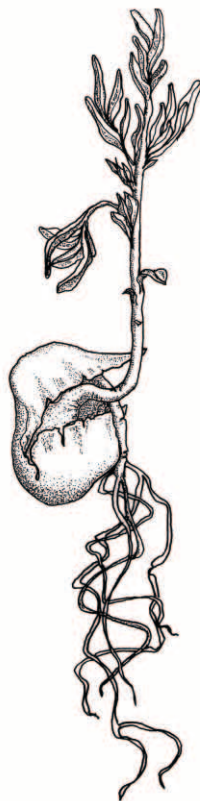
THE FIRST SEED a gardener pushes into the soft promising soil is usually that of a vegetable or an annual plant. If the gardener then graduates to perennial seed, he will find his project becomes harder. Moving further up the difficulty scale to alpiners, wildflowers, plants of the mountains, the desert, and the tundra, even more skills may be required. In order to overcome the challenges to achieving germination, we gardeners, over centuries, have evolved many tortures to inflict upon our little seeds.



Embarking on a life of seed sowing can change how you view the world. Strange adventures lie ahead. Here is the

first hard lesson to be learned. People who have been used to germinating marigolds and morning glories, cucumbers and green beans, are almost always in for a rude awakening upon sowing their first batch of alpine seed. To begin with, it is unusual to receive a large amount of seed in the packet; the seed is more rare. Second, out of a total, say, of twenty seeds, if eleven germinate you should be congratulating yourself. If half of those make it through the following winter you should consider yourself blessed indeed.

You see, annual and vegetable seeds have extremely high germination rates. This is not by accident. Large companies produce them and they run germination trials every



year. Above and beyond that, commercial annual and vegetable seed rarely contains much in the way of inhibitors to stop them from sprouting. Inhibitors are the reason humans have had to torture seed. These inhibitors appear in many forms. Nature, in Her wisdom, does not want to put all her eggs in one basket. That would put a species at risk. By holding back some seed from germinating She ensures survival. Inhibitors can be chemical, aided by dry storage in some cases, eliminated by it in others. This is why some seed must be fresh to germinate, while others have improved performance after being stored. An inhibitor can be simply mechanical, like a hard seed coat that makes it impervious to water. The one thing every seed needs to sprout is water. The seed must actually imbibe it, soak it up somehow, before any growing can take place. Some seed, like tomatoes, will die if they freeze once they are growing. Others, like perennial daisies and some salvias prefer to sprout at warm spring temperatures even though the plant itself is hardy. Some, like columbine want cold treatment. But even with these types of seed it is vital that the seed take up moisture at non-freezing temperatures first. Cold treatment is called stratification, also known as "outdoor treatment." One sows seed in a moist environment and then exposes it to varying outdoor temperatures throughout the winter. Simply putting a dry packet of seed into your freezer will do no good. Moisture is key.

Suffice it to say that there are hundreds of variables to play with in order to get wild seed to sprout. Oscillating temperatures is a big one. Some fleshy seed in fruits need to ferment and then be washed clean. Some seeds need to be scattered over the surface of the pot because they need light to get started, other species require dark to germinate.

We have all heard about seed that needs to be burned in forest fires. There are a number of Australian plants that appear to need the heat of fire to germinate. They are called "fire ephemerals." Some seem to respond to having "smoke water" applied, and no, I do not (yet) have a recipe for that. Some U.S. plants like longleaf pine, some *Rhus* and *Rubus*, exhibit enhanced germination due to the enriching effect after a fire. However, not all soils are enriched by fire. The conditions following Mount St. Helen's eruption disclosed nutrient impoverished areas. At any rate, the requirements of seeds are as diverse and inventive as are the numbers of angiosperms on earth.

There is one famous story that springs from the work of an ecologist named Stanley Temple. In the 1970s he hypothesized the reason for the decline in the population of the Tambalacoque tree (*Sideroxylon grandiflorum* (*Calvaria major*)) on the island of Mauritius in the Indian Ocean. He believed that the dodo bird, extinct since 1681, used to eat the hard coated seed of this tree. The dodo vanished because of how trusting the animal was and how easy it was to approach. Sailors slaughtered them in large numbers. Pigs introduced to the island also ate up the eggs. From discovery to extinction was only 180 years. Temple surmised that the tree seeds needed to pass through the stone filled gizzard of the dodo in order to germinate. To test his theory he force fed 13 seeds to turkeys and managed

to get 3 to germinate. His methods, though, were not scientific and lacked control groups. Many have debunked his theory as a myth, but it is a good story. And good stories have a life of their own. For our purposes it offers yet another example in which man, in attempting to mimic or “help Nature along” has been abusing seed these many, many years.

We stratify seed. This is the aforementioned exposure to cold. Except that there does exist a “warm stratification.” Peony seeds need this. At NYBG we used a locker with a light bulb at the bottom, below all the shelves, to keep things warm. We would dampen peony seeds on top of paper towels, slip them into plastic bags and put them in the locker. After about two months a radicle (read: root) is formed. Then we would cautiously tweezer them into pots and subject them to three months at 40 degrees. (Or basic outdoor treatment in cool weather.) When shifted back to 70 degree warmth the leaves would finally form. (There were exceptions. *P. brownii* germinated at 40 degrees.)

GA-3 or gibberellic acid is a substance used to enhance germination in some difficult species. I always wondered about the unnaturalness of using chemicals like this. Turns out it is natural. Certain cactus (*Echinocereus pectinatus*) and rosulate violas from the Chilean Andes will only germinate in deep gravel or crevices where there is a bit of leafmold. When moist, fungal action creates gibberellins. Thus the maturing plant is situated in a spot with moisture, coolness, and a little food in a xeric environment. It is a survival mechanism.

So too is the need for repeated wetting. A seed that falls on dry ground and gets rained on once, at a time that is not the real “rainy season,” has little chance of survival. The same logic applies to stratification. If a seed falls onto a nice moist spot during fall rains and decides to sprout immediately it will most likely perish during the hard long freeze of winter. The inhibitors in the seed make certain that either the coat is too hard, the chemicals need repeated washing, or it needs oscillating temperatures; all of which set up the seed to germinate comfortably at the end of winter or sometime in spring. Some seeds need several years of outdoor fluctuating temperatures. And for good reason. If one year always did the trick and all the seed on the ground germinated, and then some disaster befell the colony, what hope would there be for survival of that species? There are always holdouts. For that reason savvy rock gardeners hang on to their seed pots. For several years.

Trillium is another good subject to observe. It takes some 6 or 7 years from sowing to a flowering plant. Each year a new leaf is put out until the plant has become strong enough to produce a typical 3-parted leaf. Flowering comes next. The aril attached to the seed is sweet, thus the seed is often dispersed by ants. I have seen people roll their eyes when told of the lengthy wait for a trillium to flower. They feel that seed sowers, obviously, have the patience of Job. But if you sow some seeds every year, and just go about your gardening, eventually 7 years go by. The flowering of your trilliums is what happens when you are busy doing other things.

Another intimidating and advanced technique is scarification. This does not involve frightening your seed. (Although it may scare, even wound, the gardener.) The word comes to us from Greek and means “to scratch.” Many alpines of the pea family require this, and I have found that if you scarify 100% of your seed then 100% will germinate. The directions for doing it will often tell you to abrade the seed between two pieces of sandpaper. I have never been able to do this. I either *a)* lose all the seed or *b)* am unable to abrade anything. Or both. The point is to create an opening for water to enter the embryo. Directions will also say to nick or chip the seed with a knife or a razor. Round seeds will not stand still for this. Directions say to prick them with a pin or drill a tiny hole in the hard seed coat. Now come on. With seed no larger than the head of a pin, where am I going to find the correct sized drill that will do this?

For what it’s worth, and discovered due to pure exasperation, here is my method. I leave the seed to be scarified in the transparent glassine envelope it came in. I take an exacto knife and, holding down the envelope with a couple of fingers, nick each seed through the envelope one at a time. If you try this outside the envelope the seeds shoot everywhere and you lose more than you pierce. Done. If you scarify and then soak them overnight just about every single one will sprout.

For years I’ve heard the term “seedling vigor” bandied about. Here is one thing I know about it. One day I got some little plastic cups, put a bit of warm water in each, dropped a label in, and then the scarified seed of *Astragalus* and *Oxytropis*. I left them overnight. I left them the next night. I forgot about them completely. A week later I went to the potting bench for some other reason. Yikes! What had I done? Peering into each cup I was amazed that almost all the seeds had thrown down a little root! I poured out each cup onto a waiting paper towel, gingerly picked up each seed and placed them in soil filled pots. I topped them with grit. Almost every one survived. Talk about vigor. Talk about torturing seed. By the way, as a seed sower, once you graduate to grit as a topper you will never look back. It creates a perfect environment for seedlings, plus you can sow right on top of it for the light lovers.

In the annals of being unfair to seed I have one more confession to make. One busy spring day as I hurried down my shade path I noticed that last year's *Arisaema sikokianum* club of a seed head, ripe and bright red, was lying on the ground near the path. Now in a perfect world (or as a perfect gardener) I would have collected it last fall, dried the seed and sown it in pots in January or February.





Hating to do nothing with it, but not having a moment to spare I broke it off, scooped out a sort of trench that would fit the whole thing and buried it not far from the mother plant. (Notice I did not say planted.) I swear that in less than two weeks as I was skittering by I was stopped in my tracks at what appeared to be a bright green cushion plant. Odd, I thought, a cushion. In the woodland? Dropping to my knees I realized that it was dozens (if not hundreds) of baby *Arisaema*. When I tugged on a couple it was clear that they were still attached to their "cob." Hmmmm. This was interesting. Perhaps it would be better to wait till next season to dislodge them. When they were not such tender babies. Or maybe the "cob" would go away by next year. At least I had achieved germination. And I didn't resort to any surrogate pseudo-dodo to do it.



NARGS Upcoming Events 2012-2013

2012 Annual Meeting - March 9-11, 2012
Everett, Washington (see page 9)

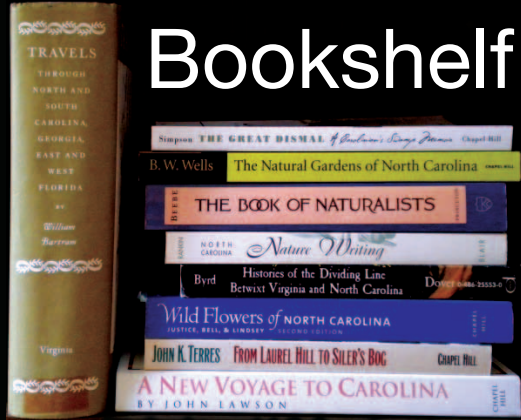
2012 Eastern Winter Study Weekend - October 12-14, 2012
Pittsburgh, Pennsylvania (see page 94)

Further ahead

2013 Annual Meeting - May 2-4, 2013
Asheville, North Carolina, at the DoubleTree Biltmore Hotel

BOBBY J. WARD

William Byrd & other nature writers of the American Southeast

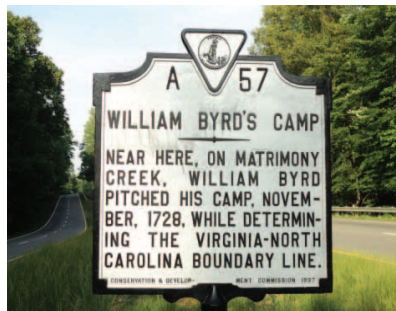


Bookshelf

A FEW YEARS AGO, while returning home to North Carolina from Scotland through Philadelphia, the plane headed south over the Delmarva Peninsula and the Eastern Shore of Virginia, and then crossed the Chesapeake Bay at the vast Hampton Roads metropolis. Presently the urban complex and naval shipyards faded into quilts of cultivated fields and the green forests of the Great Dismal Swamp, already tinged with October color. In the center of the swamp, Lake Drummond, shiny black from acidic tannins and peat, provided me an unexpected adrenaline rush because I had never seen this famous swamp from an aircraft, although I grew up on its very border.

In the brief time it took the plane to traverse the Dismal, I recalled a high school assignment to read selections of Colonel William Byrd's diary about the mapping of the border between Virginia and North Carolina. Byrd (1674-1744), a Virginian who was educated in England, undertook

the task of surveying a boundary between the two quarreling states, beginning in 1728. Published much later, in 1841, as *Histories of the Dividing Line Betwixt Virginia and North Carolina*, Byrd's diary describes his crew hacking its way across the Dismal Swamp among snakes, insects, and assorted vermin, remarking that, "We were so hampered with brambles, vines and poke bushes, that our horses could hardly force their way through them." Byrd recorded numerous botanical observations, such as the "gall bush, which is a beautiful



evergreen, and may be cut into any shape. It derives its name from its berries turning water black, like the galls of an oak." Byrd had to find out everything about the area on his own, noting that "it is hardly credible how little the bordering inhabitants were acquainted with this mighty swamp, notwithstanding they had lived their whole lives within smell of it." Byrd "saw plainly there was no intelligence of this *terra incognita* to be got," except what he observed himself.

I was raised on a farm a few miles from the southwestern edge of the Dismal Swamp, on a sandy terrace called the Suffolk Scarp, part of an

ancient beach left behind from an Interglacial Event when the Atlantic Ocean receded from eastern North Carolina, exposing the vast southern swamp. Satellites and astronauts have frequently photographed this clearly visible "white ribbon" that stretches thirty miles or so southward from Suffolk, Virginia, to Edenton, North Carolina. Byrd described this upland as "sandy as the deserts of Africa and equally barren," reporting that it "lies upon a ridge called Sandy Ridge, which is so wretchedly poor that it will not bring potatoes." Even today the area is known as the Sandy Ridge Road.



NASA Satellite photograph of eastern North Carolina/south-eastern Virginia.

The Great Dismal Swamp (the southern $\frac{1}{3}$ is in NC, the northern $\frac{2}{3}$ in VA) is clearly visible as the deep green rectangle at the extreme top of the photo, with the black dot in the middle being Lake Drummond. The big river south of the Swamp is the Chowan River.

The Sandy Ridge Road is just visible as a thread-like white line running south-southwest from the Great Dismal Swamp (at about 7 o'clock) to the Chowan River at Edenton, NC.

William Byrd was my introduction to nature writing and its near relatives, botany, gardening, and horticulture. Nature writing is a distinctive literary style that can seamlessly blend one discipline with another, making it difficult to pigeonhole the author's type. It is doubtful Byrd imagined his diary would become required reading in an American literature class. I should report that we did not read sections from his "secret" diary, written in code, as it contained ribald and salacious activities of the Carolina "heathens"—that reading would come later, on my own time.

In college, I stumbled upon the poem, "The Slave in the Dismal Swamp" by Henry Wadsworth Longfellow (1807-1882), and realized how similar the two descriptions of the great swamp are:

*Where well-o-wisps and glow-worms
Shine in bulrush and brake;
Where waving mosses shroud the pine,
And the cedar grows, and the
Poisonous vine is spotted like the snake.*

I continued my college degree studies and then concentrated on my professional career during the next decades as an environmental scientist at an electric utility company. From time to time I stumbled upon used books that found a home on my bookshelf, primarily on natural history, but also a growing stack on plant lore and mythology, the latter resulting in a collection I compiled into *A Contemplation Upon Flowers: Garden Plants in Myth and Literature* (1999). And while my writings have taken me down various horticultural roads and trails to gardens and gardeners around the world, I have never strayed far from an interest in natural history and nature writing, particularly that of the American Southeast and North Carolina—thus adding to my growing "roots" library.

Imagine my excitement at discovering a library discard of William Bartram's 535-page *Travels Through North and South Carolina, Georgia, East and West Florida*, a facsimile of the 1792 London edition. My local county library "de-accessioned" the book because it had not circulated in a few years, the library electing to stock more pop fiction. For a mere \$1.00, I thrilled at Bartram's "apprehension of the hill being set on



fire" when he first saw the flame azalea (*Rhododendron calendulaceum*) in full blossom, "glowing" in the distance, and with his discovery in Georgia of "a new flowering shrub, resembling the Gordonia, in perfect bloom . . . of the first order of beauty and fragrance," later named *Franklinia alatamaha*, honoring Benjamin Franklin.

John Lawson (1674-1711) provided an "exact description and natural history" of the Carolinas, starting in Charleston and ending with his death, on a return trip, in New Bern, North Carolina; he was captured by the Tuscarora, who tortured him by

sticking him with pine splinters and setting him ablaze, according to one version of his death. In *A New Voyage to Carolina* (1709), Lawson describes 308 Carolina plants, representing a hundred taxa, that were sent back to his London patrons, the herbarium sheets now residing at the British Museum, but recently digitized by East Carolina University and available for online viewing through its library. Fortunately, UNC Press has kept Lawson's *Voyage* in print, including an electronic original facsimile edition.

The twentieth century was not without nature writers whom I admired and whose subject was the Southeast. Edwin Teale (1899-1980) in *North with the Spring* (1951) describes a journey with his wife beginning in the Florida Everglades and continuing northward, following the advancement of the season while describing spring wildflowers, bird migrations, and the landscape continually impacted by human habitation. Annie Dillard (b. 1945) gave a chill to my spine when I read, in *Pilgrim at Tinker Creek* (1974),

her evocative, accurate description of a total eclipse of the sun, one that I, too, had witnessed in eastern North Carolina in 1970. Her home by a creek in a Virginia Blue Ridge valley gave her the opportunity to witness the mystery of nature—the flight of wood ducks, the great “arms” of a sycamore, a flush of rabbits, and the flag iris and bulrushes sluggish in a lazy, summer creek.

From Laurel Hill to Siler's Bog: the Walking Adventures of a Naturalist (1969) was written by John Terres (1905-2006), an *Audubon* magazine editor, who retired to Chapel Hill, North Carolina. For a decade he observed animals and plants on Mason Farm Biological Reserve near the North Carolina Botanical Garden, and described, for example, “How a Vulture Finds Its Prey” and “The Black Gobbler of Willow Oak Swamp.” Pulling *Laurel Hill* from my bookshelf recently reminded me of a cold afternoon walk I took with William Lanier “Bill” Hunt (1906-1996), spry even in his ninth decade, along Morgan Creek that cuts through Mason Farm.

Franklinia alatamaha

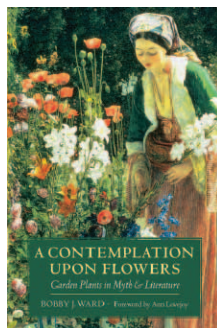


Hunt, the appointed South-regional vice-president of the American Rock Garden Society at its founding in 1934, pointed out buds on native shrubs and trout lilies coming into bloom. He also showed me the rock where Thomas Wolfe, a UNC student, reportedly wrote plays and chapters of his books, perhaps the beginnings of *Look Homeward, Angel*. Afterwards, as we drank hot cocoa, he told me of “demonstrating” rock gardening in the basement of a local Methodist church by hauling in 100-pound blocks of ice, covered with burlap and sphagnum, and potting in *Asarum*, *Antennaria*, *Chrysogonum*, *Phlox*, and other native plants collected around Chapel Hill. It was mid-July in the 1930s, without air conditioning, but locals poured into the cool room to see “rock gardening coming to the South,” he told me.

Often, when I return home to visit family members in northeastern North Carolina, I frequently stop along roadsides as I cross the basins of the Neuse, Tar, Roanoke, and Chowan rivers. If it’s in March, I can admire the breathtaking sight of a field of thousands of atamasco lilies at the end of a rural airport runway;

if mid-autumn, I note the distinctive smell of peanut harvesting hanging in an evening’s still air; or if winter, I will see flocks of Canada and snow geese heading toward the Lake Mattamuskeet Wildlife Refuge. But many times I think of William Byrd and his “grip” on me as a young teenager, gradually promoting in me an enduring interest in regional natural history writing and of the wordsmiths that produce it.

Bobby J Ward’s
**A Contemplation
Upon Flowers**
*is published by
Timber Press
and is available
through the
NARGS website
www.nargs.org
(choose BOOKS
and option 3)*



A field of atamasco lilies (*Zephyranthes atamasco*) in northeastern North Carolina





Harrimanella hypnoides

Some more from Mount Washington

GEORGE NEWMAN

June 20th, the day after the Annual Meeting in New Hampshire, was a perfect day with clear skies, little wind, and 60 degree temperatures in the alpine zone. Twenty NARGS members, including botanists Arthur Haines and myself, drove the Mount Washington autoroad to the Cow Pasture, explored it and then descended to the Alpine Gardens. We were very lucky in that many choice plants were in full bloom.

The Cow Pasture at 5650 feet is a level area along the road which often has high winds and fog. We were very fortunate to see *Silene acaulis* (moss campion) in full bloom including the largest clumps. This plant is very rare in the eastern United States and is believed to only grow on Mount Washington. However, it is very common in the western United States. But here *Diapensia lapponica* and *Rhododendron lapponicum* had finished blooming. After exploring the Cow Pasture, we hopped boulders and visited an area of late



Diapensia lapponica

White form of *Houstonia caerulea*



snow melt about 200 feet above the Alpine Gardens. Most years the snow lingers until the very end of June. This year the snow melted early giving us the opportunity to see many plants in bloom. Many plants of *Harrimanella hypnoides* (sometimes treated as *Cassiope hypnoides*) were found in rock crevices in full bloom.

The tiny bell-shaped flowers on red stems above mossy foliage were striking. Growing with the *Harrimanella* but far more abundant was *Phyllodoce caerulea* (mountain heath). The plants had masses of flowers over their needle-like foliage. Several plants of *Loiseleuria procumbens* (alpine azalea) were also in bloom but it was out of bloom at higher and lower elevations. The reason for this is the late-melting snow.

We left the snow field with great reluctance and descended to the Alpine Gardens. The section of the trail through this area is very wet and drains into Pinnacle Gully. There were large colonies of *Geum peckii* (mountain avens)

which is found only in the White Mountains of New Hampshire and Brier Island, Nova Scotia. In the White Mountains it grows most commonly in damp areas, often in ravines and near streams. In the same area there were beautiful clumps of *Houstonia caerulea* (blueets) in the white-flowered variety which is sometimes called var. *faxonorum*



Geum peckii

After the Alpine Gardens, all of us returned to our vehicles. A few brave people drove to 6000 feet and descended the very steep upper portion

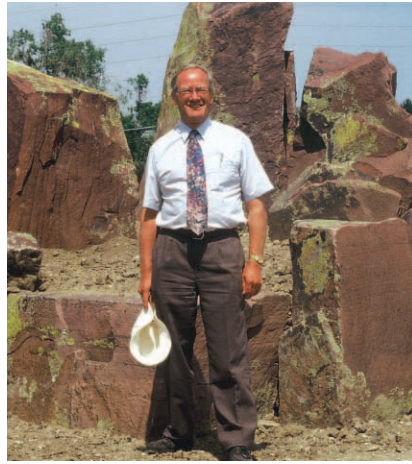
of the Great Gulf Trail. This section is lined with clumps of *Salix herbacea* (dwarf snowbed willow) growing in small and large mats. A few plants of *Diapensia lapponica* were in full bloom clinging to the edge of a cliff. Further down the trail a few plants of *Cardamine bellidifolia* (alpine bittercress) were found blooming in a moist rock crevice.

We left the Great Gulf at 3pm exhausted, but returned safely to the bottom of the road without burning our brakes out — a good day.

Andrew Pierce

1935-2011

C. ANDREW PIERCE, past Director, Assistant Director, Propagator and Conservatory Superintendent at Denver Botanic Gardens, passed away early on the morning of Saturday, September 17, 2011, at his home with his family around him. Andrew was well known and universally loved and respected by his peers throughout the Rocky Mountain Region and beyond. He was born in Kent, England and



graduated from the Royal Botanic Gardens at Kew's horticultural training program. He brought the rigor and intellectual prowess of that training to Denver Botanic Gardens in the mid-1970s when he was instrumental in helping transform this still fledgling institution that had little true botanical gardening going on in it into what we enjoy today.

Hired initially to oversee the Conservatory as Superintendent, he raised the production standards and scope of the greenhouse complex and propagation ranges. He instituted our Index Seminum, and later designed (along with Lainie Jackson) our very first Perennial Border, accelerating our transformation from a Victorian Carpet bedding showcase to true botanical displays and collections.

Andrew possessed a truly astonishing range of knowledge and experience. I have never met anyone who had a broader knowledge of the Plant Kingdom. Show him a twig of a tropical tree, an obscure herbaceous perennial cultivar or a high alpine cushion plant and he would likely know the botanical name and a good deal of scientific lore about it. He loved people, and was a true friend and mentor to many of us. I doubt that I would have stayed at Denver Botanic Gardens my first few challenging years were it not for his attentiveness, his guidance and above all his warmth of heart and irrepressible humor. I know many others would say the same. NARGS members who attended the Annual Meeting in Denver and Salida in 2009 may have been led on one of the excursions to the mountains by Andrew whose enthusiasm was unfailing.

Perhaps one of Andrew's greatest and unsung legacies will be Denver Botanic Gardens' presence on Mount Goliath. It was he who first took me and many others down that trail, who trained the first volunteer docents and who championed that magnificent locale. I do not believe that Mount Goliath would be what it is today without his initial inspiration.

I know I shall think of Andrew frequently throughout the rest of my life—when I admire a glorious border in bloom, or see the first crocuses in my rock garden. And when we all descend through that fragrant forest of ancient bristlecones on Mount Goliath, we shall certainly feel his kind and gentle presence striding almost palpably nearby. *Panayoti Kelaidis.*

NARGS

Bulletin Board

News supplement to the Rock Garden Quarterly

We Are Luddites

From the President

Since joining NARGS in 1996, I have witnessed repeated efforts to understand the problem of declining membership, followed invariably by repeated failures to reverse that decline. Based on my experiences in the Berkshire Chapter over the past 16 years and what I've seen more recently as an officer of NARGS, I have some observations that I believe will shed some light on this mysterious problem.

First, we joined NARGS (and if possible, a NARGS Chapter) because we were gardeners and had some interest in rock gardening. We stayed members because we liked the people, enjoyed the Rock Garden Quarterly, and appreciated the opportunity to gain knowledge and expertise in our rather arcane subset of gardening. As we became more successful in growing plants in our particular areas of interest (woodland, western dryland, ericaceous, alpine, prairie, etc.), we periodically recruited our friends to join as well, given the natural tendency of converts to proselytize. But eventually our friends stopped joining, or moved away, or simply lost interest in traveling relatively long distances to attend increasingly redundant slide shows. The Rock Garden Quarterly, once an asset, became a liability and was read by fewer and fewer members.

As our members aged they tended to be less interested in growing from seed, and thus less interested in the Seed Exchange – which had been one of the major benefits of NARGS membership – and so the Exchange became stale. The Chapters, once the heart of the organization, lost interest in NARGS as the declining number of rock gardeners were replaced by the “hardy plant” people – well-intentioned folks who were attracted to the intelligence, energy, and overall competence of the rock gardeners, but who unfortunately had little or no interest in rock gardening themselves. Some Chapters, realizing that NARGS was becoming senescent, began to add benefits mirroring those that NARGS offered, and their members increasingly saw little value in NARGS membership. And finally, the burden of doing all of

the volunteer work that the Chapters and NARGS required wore out far too many of our members, and they simply stopped offering their time, leading to further decay and decline. So here we are today, with a worldwide membership of nearly 2600, several very strong Chapters (along with several that are just about dead), an outstanding quarterly publication, and a web presence that is simply not up to the standards of our competition.

At this point some of you are wondering why I entitled this piece "We Are Luddites." A Luddite is an opponent of industrial change or innovation. In the context of NARGS, a Luddite is someone who is detached from technology, in particular from the technology that is driving our society today - namely, information technology. And why are we Luddites? Because we joined NARGS as gardeners, not "texters." We joined NARGS to spend time with like-minded people, while today's youth - which for present purposes includes 30-somethings and, yes, even 40-somethings - prefer to "tweet" rather than meet. They want apps for their iPhones, not cookies and coffee for their meetings. They want streaming video on their smartphones, not static slideshows on Thursday nights or Saturday mornings. They want to be able to read our quarterly publication on their Kindle anywhere, rather than picking up the paper copy and reading it in bed.

So, what do we have in common with these people? Here's what: They actually love plants and rock gardening as much as we do; they simply want to access the hobby through a different portal, and that portal is information technology. Do we care? Sadly, for many of us, the answer is no. We want new members - younger members in particular - but we seem unwilling to adapt our organization to the technology that is ubiquitous among those younger gardeners. And unless we do adapt, and do it quickly, they will migrate elsewhere, and we will lose them forever, losing our organization and our hobby in the process.

So here are some solutions I believe we must implement as soon as possible if we are interested in saving NARGS:

- 1.** Replace the current website with one that is more user friendly, more attractive, more intuitive and more powerful. We built the current model on the cheap, and we're paying for that shortsightedness today. We have a site that cannot be upgraded, and as we ask it to do more of what we want and need, it will collapse. And that collapse is going to happen sooner rather than later, so we need to figure out a way to get this particular piece done quickly.

2. Digitize our entire collection of ARGS/NARGS quarterly publications and make them searchable online. For over 75 years we've accumulated a vast body of knowledge about rock gardening and rock garden plants, and right now that knowledge is simply inaccessible to almost all of our membership. It's time for us to do the obvious and get that knowledge onto the net, so that all of our members can access it easily and use it to become better gardeners.

3. Create a database of plant photographs, and then (using some advanced but relatively inexpensive software) make it possible for members to photograph a plant, upload the image to our website, and have it compared to all of the other images in the database, thus identifying the likely species. Imagine hiking in the Blue Ridge Mountains, seeing a plant that you can't identify, taking a picture with your phone, and within moments looking at two or three images that are similar or even identical to your mystery plant. How cool would that be? And we really can do it, and do it soon, if you want it done.

4. Record, store, and make available through streaming video our Chapter meetings and presentations, allowing our entire membership to benefit from the outstanding programs the Chapters present month after month, year after year. For the first time we'd be able to say to every rock gardener: If you want to see Irene Wrightman or Betsy Knapp plant a trough, or you want to travel with Panayoti Kelaidis as he explores the Drakensburg, or you absolutely must see Alan Bradshaw's talk on the plants of the Wasatch but can't attend the meeting because you're in Maine and the talk is being given in North Carolina, all you have to do is join our organization and go to our website, and the entire world of rock gardening will be available to you, regardless of where you live. If you have Internet access, you're inside NARGS, and everything we do is accessible to you.

There is more, so much more, but I trust I've made my point. Far too many of us are Luddites, by which I mean that we are focused on what attracted us to NARGS and fail to understand that the old-time features and benefits no longer find a receptive audience. We have to change, and as uncomfortable as it makes us to even consider those changes, we have only a brief window of time to make them, or we'll find ourselves preparing a funeral for NARGS – and none of us wants that.

I want and need your reactions and suggestions, so please email me. Thanks in advance.

Peter F. George, NARGS President,
<petergeorge@verizon.net>

NARGS Seed Exchange

Did you send in your seed Donations this past fall?

Great! And thank you very much. But, as of late October, it seems that we could do better (we have done in the past).

I would like all you "Seedistas" to give some thought to pitching in and helping this coming season. Now, when you have the time to contemplate your gardens, make a list of the all plants whose seeds you could contribute this year. It's such fun to make lists: easy and rewarding. Of course, that's only the beginning, and we hope you will follow up and use that list this summer to collect and donate the seeds. Look for donation instructions and forms in the summer issue of our "Rock Garden Quarterly" and our website.

I hope you've checked out our new online ordering system.

If you haven't used it yet, you can still take part in the main distribution of seeds until February 15. But you must first register by sending your email address to our Executive Secretary, Bobby Ward. **<nargs@nc.rr.com>**. Your email address is how the ordering system will recognize you as a NARGS member eligible to order from the seedex.

It couldn't be simpler:

As soon as possible, send an email to: **<nargs@nc.rr.com>**

In the Subject line, write (or copy-paste): **NARGS seedex email address**

In the body of the text, simply write your **name and full postal address**.

That's all you need to do, and you will never need to do it again... unless you change your email address.

If you will be ordering by postal mail, send your printed order form, by February 15, to:

Joan Haas, 70 Iron Bridge Road, Pipersville, PA 18947 U.S.A.

You can also take part in the second round of orders, from the Surplus Seeds - even if you don't order from the main distribution. The second round will begin on March 1 and run until March 22, and you will be able to purchase up to 100 packets of seed, at \$5 for each 20 packets, up to a maximum of 100 packets. You can order online, or request a printed list by February 15, from:

Laura Serowicz, 15411 Woodring Street, Livonia, MI 48154-3029 U.S.A. <seedintake@twmi.rr.com>

Hope you have as much seed germination as you and your garden can handle.

Joyce Fingerut, Director, Seed Exchange, <alpinegarden@comcast.net>

We have learned of the death of the following NARGS members

Catherine Hull, Manchester, Massachusetts

Andrew Pierce, Evergreen, Colorado

Gerhard Paetzmann-Gerber, Wilderswil, Switzerland

Walter Bienlien, Tawas City, Michigan

NARGS December 2010 Donations Appeal

DONATIONS between August 1st and October 31st, 2011

DESIGNATED

President's Discretionary Fund	\$5000
Seed Exchange	\$100
Rock Garden Quarterly	\$15

GENERAL FUND or UNDESIGNATED

\$160

TOTAL as of October 31, 2011

\$12065

DONORS

Anonymous
Lynn Fulton (Colorado)
Amy Fluet (Wyoming)
Robin Magowan (Connecticut)
Anne Hill (Maine)
Pat & Dan Montague (Washington)
Bruce Lockhart (Massachusetts)

Photo Contest 2011

Judging of entries to the 2011 competition is currently taking place.

Results will be announced in the next issue of the Quarterly.
Details of the 2012 competition will also be available.

THE FOLLOWING RECENTLY BECAME NARGS LIFE MEMBERS

Deanna Larson (Minnesota)

THE FOLLOWING BECAME PATRONS

Lesla E. von Munkwitz-Smith (Connecticut)

Betsy Mitchell (Maine)

Alice Lauber (Washington)

BOOK OF THE MONTH

Just a Note of Thanks and a Reminder

One of the best reasons to belong to NARGS is that when you ask for help, you get it. A very special “thank you” to all of our Book-of-the-Month reviewers for the WIKI. Grazyna Grauer asked us to start in January 2011, and we still have reviews coming in. In case you don't know who are our team of reviewers, here they are: Robin Bell, Frances Burr, Panayoti Kelaidis, Lori Chips, Hugh McMillan, and Hans Sauter.

Special reviewers by request: Ed Glover, Bobbie Lively-Diebold, Carole and Mike Bordelon, Tony Reznicek, Eric Grissell, and David Brastow. Of course, none of the above would be possible without the professional and colorful graphics by Jeremy Franceschi and Hannah Berkowitz. The color, postings, tag lines, and book covers make it first class. If you would like to recommend a book for review or join our group, please contact me. Thank you. **Betty Spar** <bettyannespar@aol.com>

Southern Appalachian Chapter Award

Mary Lou Kemp

The successful existence of a NARGS chapter depends on the constant hard work of some of its members. Anyone who has not held the post of Chairman might not be aware of the many jobs necessary to remain a viable chapter. We in the SARGS Chapter are fortunate to have Mary Lou Kemp who, without fail, has done and will do everything to see our meetings continue.

Our recipient of the Chapter Service Award has at one time or another done the following:

1. Arranged for a place to meet, seen that it was opened, arranged refreshments, and when the meeting concluded, made sure the building was cleaned and locked.
2. Contacted members as to time, place of meeting, and program content
3. Contacted speakers and fulfilled the requirements to present a program of speakers. If a NARGS Travelling Speaker was involved, she has arranged hosts, made sure cash was available for the fee, made sure accommodation was provided, entertainment and travel arrangements carried out.
4. Supported occasional projects to see we remain fiscally secure.

These and other jobs Mary Lou has always done cheerfully, competently and enthusiastically. She has managed and presented all the Chapter business (and was always happy to do so even before she was Chairman.) And, to go to the extreme, this award recipient chose a husband who would be strong backup for her efforts to see we continue as a NARGS Chapter. Our Chapter is so much richer for having Mary Lou as our Chairman. *Ev Whittemore.*

WELCOME to our NEW MEMBERS!
Persons who joined NARGS August 1st to October 31st

Aisenberg, Martin, 116 Memory Lane, Orange, MA 01364
Allan, Linda, 31-A Roberts St., Strathfield, NSW 2135 Australia
Allen, Deborah, 256 Fuller Mt. Rd., Ferrisburgh, VT 05456
Aviles, Ramon T., 1401 Ames St., Lakewood, CO 80214
Baldauf, Stefan, Hohenburger Str. 22a, Schmidmuhlen 92287 Germany
Beatty, Sue, 341 Young St., Parksville, BC V9P 1C5 Canada
Cruz, Melanie, POB 785, Barre, MA 01005
Dambrauskas, Robert, 60 Styvesant Rd., Pittsford, NY 14534
Davison, Melisa, 420 Seventh St., Brooklyn, NY 11215
Drozdzick, Ronald, 19025 Man O War Rd., Eagle River, AK 99577
Fradley, Bryce, 2132 Oak Bay Ave., Victoria, BC V8R 6T4 Canada
Geiger, David, 31 Sheep Hill Rd., Chilmark, MA 0235
Gray, David, Box 2826, Crested Butte, CO 81224
Koski, Virpi, Rosintie 8, Sastamala 38510 Finland
Loewer, Peter, 185 Lakewood Dr., Asheville, NC 28803
Lubelczyk, Patricia, 79 Ferin Rd., Ashburnham, MA 01430
McBrearty, Jackie, 218 Belmont Ave., Ambler, PA 19002
McKay, Lynne, 7763 E. 6th Pl., Denver, CO 80203
Newall, Steve, 54 Finegand Twosp, Balclutha, South Otago 9271 New Zealand
O'Connor, John, 571 Underville, Ave., Yorktown Heights, NY 10598
Plant, Marilyn, 4049 West 36th Ave., Vancouver, BC V6N 2T1 Canada
Redmond, Janalee, 6693 Macarthur Blvd., Bethesda, MD 20816
Rice, Alexander, 121 Bell St. North, Apt. 2, Ottawa, ON K1R 7C8 Canada
Robinson, Kyle, 3348 Bronze Pl., Simi Valley, CA 93063
Rutledge, Jennifer & Brad, 14 Tamarron Way, Pittsford, NY 14534
Sanguinetti, Mary Alice, 5103 47th Ave. NE, Seattle, WA 98105
Chalk, Mary, 209 Westwood Rd., Syracuse, NY 13215
Scoggin, Chelsea, 4855 Temple Park Cir. # 484, Colorado Springs, CO 80917
Simms, Catriona, 910 Ronald Ave., Missoula, MT 59801
Vaughn, Kevin, 4358 River Rd. South, Salem, OR 97302
Wallace, Michele, 2468 Hamline Ave. North, Roseville, MN 55113
Waters, Tom, 103 Feather Catcher, Santa Fe, NM 87506
Wood, Timothy, 12601 – 120th Ave., Grand Haven, MI 49417
Wysocki, Raymond, 215 Lambertville-Headquarters Rd., Stockton, NJ 08559

SPEAKERS AVAILABLE TO NARGS CHAPTERS

Many very knowledgeable and interesting individuals are available to give a wide selection of programs to your chapter. Please look at the NARGS website for information about them when you are planning your programs for the coming year. (It's shown under "Speakers Tour" and identified as "Speakers List" and you will need to login.) You may peruse the site three ways: by consulting the list of speakers, or the list of program topics (with the speakers who give them), or the list of specific areas of the country and the speakers who reside in each of them. If you are interested in being included on the Speakers List, please contact Barbara Wetzel at <aparkplace@aol.com>.

NARGS Nominations

The Nominating Committee has secured nominations to fill the three Director positions becoming vacant in 2012. These are David White (North Carolina), Paige Woodward (British Columbia) and Matt Mattus (Massachusetts), who have each agreed to their nomination.

David White (North Carolina)

I started gardening 30 years ago as a weekend hobby that got me away from work (I'm an engineer by training and profession), but over time found myself obsessed with reading gardening books, visualizing landscapes, and digging and filling holes. I joined the Piedmont Chapter 12 years ago soon after moving into a new house, became the chapter chair 4 years ago, and became chair of the NARGS Bylaws Committee last year. I have a small rock garden (mainly sedums, alliums, and crocus), but my main interests are visiting public and private gardens throughout the world, talking to gardeners about the technical and aesthetic aspects of gardening, and finding opportunities to enjoy gardening as both a creative process and a social outlet. If elected to the board, my goal will be to work with the other board members to solve problems.



Paige Woodward (British Columbia)

Paige Woodward grows plants from around the temperate world and sometimes organizes expeditions to study them in the wild. She is co-owner of Pacific Rim Native Plant Nursery in British Columbia, Canada. She was a member of the NARGS board from 2006-9.



Matt Mattus (Massachusetts)

A life-long plant enthusiast, Matt has been a member of NARGS for over ten years. Gardening on two acres in Central Massachusetts, (which sits between two local NARGS chapters, the New England and the Berkshire chapter), he frequently speaks at both locations about his passions. His blog GROWING WITH PLANTS (www.growingwithplants.com) explores his favorite gardening travels and adventures, as well as his favorite plants which include South African bulbs, Camellias and alpines. Matt keeps many troughs, containers and various alpine gardens on his property. As a designer, you can frequently see Matt's contributions on the NARGS website on banner, logos and other visual treatments. Matt is very active in the American Primrose Society, and was the editor of their quarterly. Professionally, he is the Creative Director at Hasbro.



Frank Cabot

WE HAVE JUST RECEIVED news of the death of Frank Cabot at age 86. There will be many tributes paid to him: he was one of the most important figures in the history of American gardening. He was the founder of The Garden Conservancy in 1989 and was involved in numerous horticultural organizations.

Frank was NARGS treasurer from 1977-1984 and the co-organizer of the Society's 50th anniversary meeting in Asheville in 1984. He was supporter of many NARGS activities, including the Norman Singer Endowment Fund and donor to NARGS of copies of *The Caucasus and Its Flowers* by Vojtech Holubec. Frank was a speaker at NARGS Study Weekends and at local chapters.

With his wife Anne, Frank created Stonecrop Gardens, a public garden for plant enthusiasts in Cold Spring, NY; founded the Aberglasney Restoration Trust to rescue and restore a 16th century garden in Carmarthenshire, Wales; and enlarged his parents' garden in La Malbaie, Quebec into what has been described as the most aesthetically satisfying and horticulturally exciting landscape experience in North America. His book, *The Greater Perfection*, which received The Council of Botanical and Horticultural Libraries 2003 Literature Award, was described as "one of the best books ever written about the making of a garden by its creator" by *The Oxford Companion to the Garden* (2006).

NARGS SPEAKERS TOUR PROGRAM

There are two outstanding speakers scheduled to provide programs in 2012. **Fritz Kummert** will tour eleven primarily western chapters beginning in March and continuing through April. **Nick Turland**, from St. Louis, will tour the eastern chapters in September.

The NARGS website has updated information on Speakers Tour Program speakers and the topics they will offer for programs. You will also see the schedules for each speaker, the topic selected by each chapter and the contact person. If a speaker is not visiting your chapter, contact another chapter where our speakers are visiting and arrange to see our speakers there. Comments and suggestions are welcome. Please contact the Chairperson, Barbara Wetzel, at [<aparkplace@aol.com>](mailto:aparkplace@aol.com) for further information.



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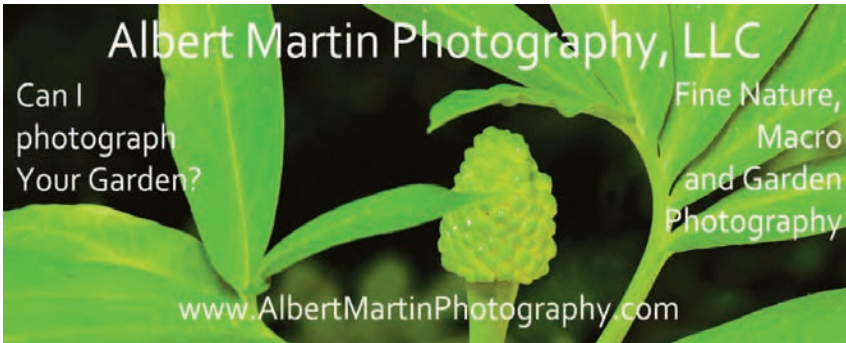
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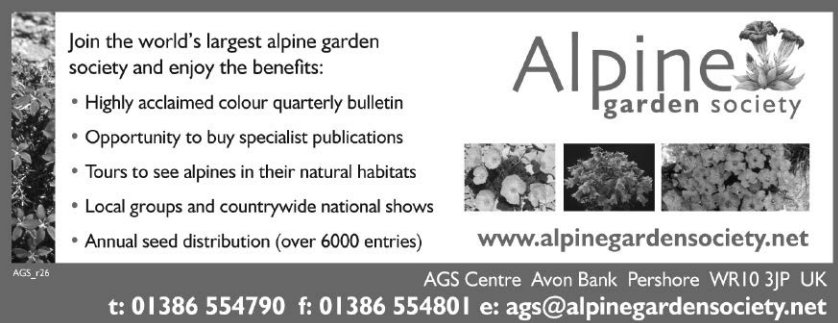


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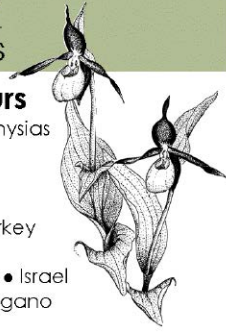
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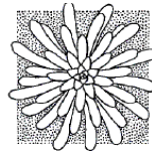
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Enjoy Nature at its finest

Our Eastern Study weekend featuring Autumn in the Garden has great speakers on this topic. All are noteworthy and will provide good information on getting your rock garden in shape for fall color and texture.

SPEAKERS

Gwen Moore - The Rock Garden in Autumn

Kathy Rienzi - Fall Blooming Native Plants - Kathy is proprietor of the Yellow Springs Native Plant Nursery

Mike Szesze - Carnivorous Plants in the Rock Garden - a different type of color - Mike is owner/propagator of Carnivorous Plants Nursery in Maryland and a retired educator.

Dr. Tom Lord - Manageable Ferns for the Rock Garden - Dr. Lord is professor of biology at Indiana University of PA and author of the book "Ferns and Fern Allies of Pa."

Matt Mattus - Fall Blooming Bulbs

Gary Whittenbaugh - Crevice Gardens in a trough - the role of Dwarf Conifers - Gary is Past President of the Conifer Society

Rex Murfitt - Saxifrages in troughs - Rex is a noted author, lecturer and authority on Saxifrages

Martha Oliver - Heuchera, Heucherellas and Tiarellas - bold leaf and color for the fall garden - Martha and Charles Oliver have introduced several award-winning plants of this group and operate Primrose Path nursery - a wholesale supplier of heuchera, etc.

Autumn in the Garden - A Time for Troughs

October 12-14, 2012

NARGS 2012 Eastern Winter Study Weekend

NARGS 2012
WINTER STUDY WEEKEND
PITTSBURGH, PA

Autumn in the GARDEN

- A Time for Troughs -



October 12-14
2012



Mid-October is prime time for fall foliage color in Pennsylvania's deciduous forest.

Come to NARGS 2012 Eastern Winter Study Weekend

Enjoy Nature at its finest by taking one of the 3 field trips offered as part of the weekend events. These trips include:

1. McConnell's Mills State Park - a rocky gorge created by Slippery Rock Creek includes a restored mill. Site of 2 endangered species – Laurentian Bladder Fern (*Cystopteris laurentiana*) and Harbinger of Spring (*Erigenia bulbosa*). Hiking these trails is considered light to moderate.

2. Jennings Blazing Star Prairie – a relic prairie from when Pennsylvania was all prairies over 10,000 years ago. Site of largest native stand of Blazing star gayfeather (*Liatris spicata*), large stands of native Asters and other fall blooming composites.

3. Pittsburgh Phipps Conservatory and Botanical Garden and National Aviary Rock Garden – the trip will go through areas of lovely fall forest and the tour of the

nationally renown Phipps Conservatory (second or third largest in the world depending on how space is calculated) is spectacular. The fall chrysanthemum show will be in full regalia and the tour will include visiting the newly renovated Allegheny Chapter rock garden at the National Aviary.

Also in the weekend program will be speakers, workshops, vendors, trough show, plant auction, raffle and other events.

CONTACTS:

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362 Vermont Ave.
Clairton, PA 15025
412-233-5902

Lclehman1@verizon.net

**NARGS 2012
WINTER STUDY WEEKEND
PITTSBURGH, PA**

Autumn in the GARDEN

*- A Time for
Thoughts -*



**October 12-14
2012**



Karen Schmidt (REGISTRAR)
111 N. Benbrook Road
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karensmg@aol.com

NARGS CHAPTERS (meeting place/area) & CHAIRPERSONS _____

Adirondack (Ithaca, NY)	Billie Jean Isbell - bji1@cornell.edu
Alaska (Anchorage & Mat-Su Valley)	Carmel Tysver - garden@gci.net
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Wisconsin-Illinois (Madison-Chicago)	Ed Glover - glover@oncology.wisc.edu

NARGS STRUCTURE _____

The officers of the North American Rock Garden Society consist of a president, a vice-president, a recording secretary, and a treasurer. The officers are elected by the membership at an annual meeting.

The Board of Directors of NARGS consists of the four above-name officers, the immediate past president of NARGS, nine elected directors, and the chair of each NARGS chapter. Chapter chairs are required to be NARGS members by NARGS by-laws.

The affairs of NARGS are administered by an Administrative Committee (called AdCom) consisting of the president, vice-president, recording secretary, treasurer, and one director-at-large, selected annually by the NARGS officers from among the nine elected directors.

OFFICERS _____

President	Peter George, petergeorge@verizon.net PO Box 833, Petersham, MA 01366
Vice President	Harvey Wrightman, wrightman@golden.net RR#3, 1503 Napperton Dr., Kerwood, ON N0M 2B0
Recording Secretary	Barbara Wetzel, 20 Braeburn Lane, Barrington Hills, IL 60010
Treasurer	Bill Adams, 330 Carlile Ave., Pueblo, CO 81004-1054
Director-at-Large	Betty Anne Spar, 206 Wolfe St., Alexandria, VA 22314
Immediate Past President	Grazyna Grauer, Dublin, OH

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2009–2012	Marguerite Bennett, Seattle, WA Lee Curtis, Lakewood, CO Ray Deutsch, Redwood City, CA
2010–2013	Jane Grushow, Ephrate, PA Philip MacDougall, Surrey, BC Anne Spiegel, Wappinger Falls, NY
2011–2014	Lola Lloyd Horwitz, Brooklyn, NY Janet Novak, Philadelphia, PA Betty Spar, Alexandria, VA

MANAGERS _____

Executive Secretary	Bobby J. Ward (919) 781-3291 PO Box 18604, Raleigh, NC 27619-8604 nargs@nc.rr.com
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