

Conifer Quarterly

Vol. 28 No. 3

Summer 2011



Tsuga canadensis 'Minuta'
Photo by Dennis Groh



Pinus mugo 'Mitsch Mini'
Photo by Dennis Groh

The *Conifer Quarterly* is the publication of the American Conifer Society

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The purposes of the American Conifer Society are the development, conservation, and propagation of conifers, with an emphasis on those that are dwarf or unusual, standardization of nomenclature, and education of the public.

Conifer Quarterly

Summer 2011
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There are so many marvelous individuals in the ACS. This was apparent at the June 17-18 Central Region meeting in Ames, Iowa where over 150 members were in attendance. I especially want to recognize organizers Pam Maurer and Gary Whittenbaugh for making this a memorable event. Hardworking members Constance and Greg Skinner, Paula and Joe Flynn, Greg and Sue Olson, Emily and Alan Munson, and Caroline and Mark Kehrl opened their marvelous residential gardens for tours. Generous members donated great plants for the auctions. Mary Yee donated a beautiful Chinese hand-made silk depiction of a landscape including pines that sold for \$160. Auctioneers Rich Eyre, Bill Barger and Dennis Hermesen teamed up for the grand finale to the festivities. Check out Jerry Belanger's Central Region Newsletter on the ACS website for pictures.

Has anyone else read Richard Preston's book *The Wild Trees*? It is a paperback that chronicles tree canopy research in the redwood forest. I can hardly wait for the August 4-6 ACS National Meeting in Silverton, Oregon. This "pilgrimage to conifer Mecca" will certainly be a treat for those fortunate enough to be able to attend. I have heard very good reports regarding the Oregon Garden at Silverton, and it will be a marvelous opportunity to visit Iseli Nursery and Porterhowse Farms. Thanks to Brian Jacob, Joe Carli and all the fine and generous people who have participated in making this meeting happen.

Tom Cox is busy planning an ACS trip to The Netherlands for 2012. Judging by the positive comments received from the last such trip to Great Britain, this trip

FROM THE PRESIDENT'S DESK

has great potential. The dates should be finalized soon.

There is a new Southeastern Region website created by Flo Chaffin www.southeasternconifers.com and a new SE Region newsletter (June 2011) edited by Maud Henne has been posted there. It saves the ACS money if we can send out newsletters and notices regarding ACS events electronically, so please let John Martin (conifersociety@aol.com) know what your e-mail address is if you have not already.

One item that will be on the agenda for the upcoming Board Meeting is a membership survey. In 1994 Orlan Gaedert created a survey that was mailed to our members and we should conduct another before too long. If anyone has any expertise with surveys and would like to have input I would certainly welcome your participation. Feel free to contact me or the others listed in the directorate at the back of this publication if you wish to volunteer for the ACS in any capacity.

Thanks to Ridge Goodwin for organizing this year's September 9-11 Northeast Region Meeting in Burlington,

Vermont, and to Flo Chaffin for putting together the October 21-23 meeting in Athens, Georgia. These both promise to be top quality meetings. Don't be shy, come out and enjoy the fellowship, see the sights and acquire beautiful plants for your garden.

Faithfully yours,



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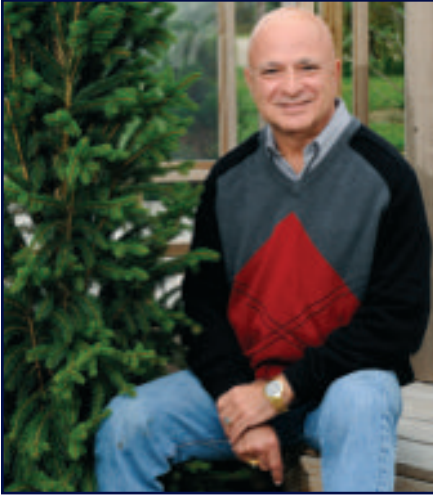
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EDITOR'S MEMO



The news has by now spread far and wide already, but the American Conifer Society remembers in this issue of the Quarterly one of its pillars once again. Last February Dr. Al Paulsen passed away. His work and support of the Society, as well as his generosity, will be remembered in the lives he touched and the meaning his life had in service to his country in World War II. Take a minute to recall his many contributions to the on-going understanding and appreciation of conifers.

This issue of the *Conifer Quarterly* contains several journeys which provide our readership with greater insight into overseas conifer experiences. Tom Cox takes us on a trip to Ascension Island in search of the most remote conifer in the world. Tom describes his observations of both *in-situ* as well as *ex-situ* conifers on that isolated volcanic island in the equatorial waters of the South Atlantic Ocean. From several thousand miles away, Jörg Kohout posts his second report on his travels in the Altai Mountain range

in search of witch's brooms. He and his team continue their expedition. This time his saga leads him to discover a supermini broom, no larger than the size of a human hand.

In the Spring CQ we were reminded of the tenets and connections our reference Garden Program has. This program constitutes a major educational outreach to communities. In addition, we saw how our auctions at regional and national meetings support the efforts of the Reference Garden Program. In this issue, Mary Coyne reports on the Wellesley College Conifer Reference Garden. Four years in the making, the Wellseley Garden contains sixty-two different conifers. The garden is used by students in horticulture, ecology and environmental studies programs. Mary describes her own personal education to conifers as she planned the layout.

From ACS' regions comes news that the Southeast Region has begun publishing a newsletter again. The *Southeastern Conifer* has good information in it about the role of Reference Gardens in the global preservation of conifers. The Southeast Region is holding its meeting in Athens, Georgia this October 21-23. Barbie Colvin invites members, guests and visitors to spend time taking in the gardens along the way to the meeting and then afterward too. The Northeast Region will meet in Burlington, Vermont this September 9-11. Richard Dube writes that wonderful gardens and pre- and post-tours will afford visitors a fantastic weekend in a "conifer-rich" environment.

Again from the South, Rona Bethea

BY **RON ELARDO**

discusses the Gardens on the Green, a public garden in Gainesville, Georgia. Rona informs us of the physical construct of the Gardens and its conifer offerings. Gardens on the Green has its plants sited so that they can be viewed from every angle. The conifers in the Gardens were chosen to highlight differences in form, color and texture. It is visited on a regular basis by individuals of all ages.

Richard L. Bitner has written a new book: *Designing with Conifers*. Jerry Belanger has critiqued this addition to the conifer reference book corpus. Jerry's review is interesting and frank. I trust that you will find the review thought-provoking.

In my last Editor's Corner I presented my experiment with conifers as houseplants. Wynne Keller reports on wintering potted conifers in the home. Wynne's report provides valuable insights and information on successful ways to overwinter conifers in the home. In this *Quarterly* I have reported on the outcome of the experiment. In addition, I have embarked on a second experiment: potted conifers. I have begun this endeavor in order to encourage gardeners with limited space to discover the joy and satisfaction of conifer-gardening.

Lastly, the Fall *CQ* seeks articles on your favorite conifer. David Rasch writes on his, the Bristlecone Pines. David has provided breathtaking photos of these ancient trees in their environment. I realize that it is difficult to pick one favorite conifer, but I look forward to seeing the fruits of your thought processes.

My last word to you is a request. Please remember that, when you submit

photography, photos need to be 3 – 5MB (megabytes). We can always take larger photos and reduce them, but not the other way around, without loss of data. Thank you in advance for your support.

Enjoy this edition of the *Conifer Quarterly*.

Ron



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Please send your .jpg photos and articles (word document with very little formatting) to the editor as either: 1) email attachments (keep in mind most service providers only allow up to 10MB's) or 2) on a disc well in advance of the published deadlines.

Not providing print ready (large enough) photos often results in your article not being included in the *Conifer Quarterly*.

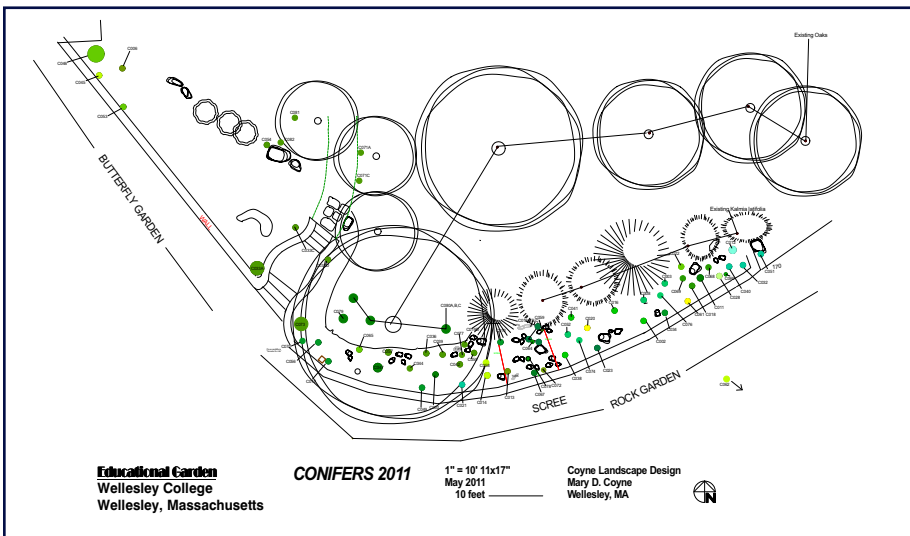
Wellesley College Conifer Reference Garden – Established in 2007

Text and Photos by Mary D. Coyne

Sometimes the path to a Conifer Reference Garden is circuitous. Here at Wellesley College, it started with my retirement after 32 years of teaching biology (not botany!) and my subsequent entry into the Landscape Design Certificate Program at Arnold Arboretum of Harvard University. The death of a well-known and much-beloved Wellesley faculty member, Dr. Harriet Creighton, whose passion was teaching everyone about botany, left us searching for an appropriate memorial. Reworking my landscape design assignment for a rock garden, I presented a proposal for an educational garden. Dr. Creighton's companion of many years was delighted with the drawings and detailed description and provided lead funding for the project.

And so was born the idea for what

became the Creighton Educational Garden located along the pathway leading to the College's greenhouses and opposite Botanic Gardens' Visitor Center. The garden design, which included a new retaining wall and stone steps with a wide viewing platform (and favorite lunch spot), turned into an educational experience for all those who worked to bring it into reality. For the retaining wall, in consultation with Geology faculty at the college, we chose old weathered, locally appropriate field stones capped with blue-stone for safety reasons, as the first thing visiting children do is walk on the wall. The stairs provide an appropriate portal to the adjacent Alexandra Botanic Garden and Hunnewell Arboretum, easily seen from the Visitor Center as the direction to



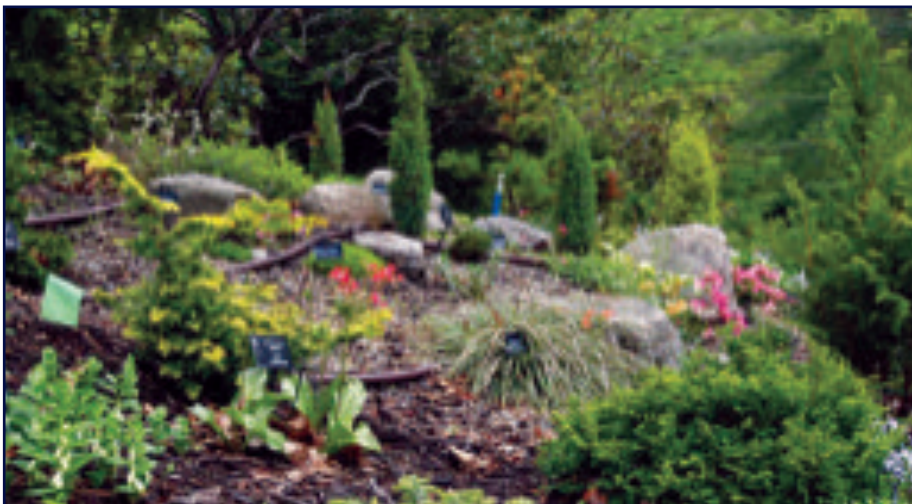


The Conifer Reference Garden as it looked early in the Spring 2011

proceed to the Botanic Gardens.

Three foci resulting from three different sun/shade patterns define the educational garden, which has a very large old oak towering above a substantial part of it. The first is a rock/scree garden using a number of alpine plants, both herbaceous and woody, showing the acclimation of plants to their microenvironments. The second is a prairie meadow area geared to supporting the life cycle of resident butterflies. This area contains many native perennials. The third focus, the conifer reference garden, is spread across both these areas but is concentrated in the rock garden/scree

area. Because of the height of the garden above a three foot wall, dwarf and miniature conifers are the primary subjects – an appropriate choice since Professor Creighton’s area of expertise was genetics and these special conifers in the reference garden are genetically interesting. Students and visitors can compare these specimens with standard size related conifers in the adjacent arboretum and botanic gardens. Many of the dwarf and miniature conifers are distributed throughout the garden area to provide structure, winter interest, and continuity to the garden as a whole. Inherent in the design is seasonal interest for passers-by



This landscape is part of the Scree

particularly during the academic year from September to June. This includes conifers of various colors, shapes and sizes, demonstrating the possible use of small conifers in residential gardens, along with spring and fall bulbs and a variety of rock garden plants with differing foliage and flower colors, sizes and shapes.

When this garden was first designed, I knew practically nothing about conifers. I spent the winter perusing books, visiting web sites, plotting sizes, shapes and colors over and over again. It finally began to sink in. At New England Grows, Larry Stanley of Stanley & Sons, Inc. suggested we join the American Conifer Society and establish a Conifer Reference Garden. After becoming a member of the Society, I was directed to Jerry Kral and Elmer Dustman, who both went over my plans and plant choices and provided helpful suggestions. We obtained the bulk of conifers from Stanley & Sons (about 40 plants) with the rest coming from other nurseries. There are some plants on the list still missing, but I have discovered that is half the fun – trying to find the rest.

The majority of the conifers were planted in the spring of 2007. The garden at present contains 62 different conifers representing 7 families and 15 genera of conifers, which added 2 new genera and 14 new species to the overall collection in the Botanic Gardens. Other gymnosperms have also been included, such as: *Ginkgo biloba* Witch's Broom and *Ephedra minima*. The Reference Garden also contains a specialized area called an 'alpine scree' where the soil is composed of 2/3 pea stone and 1/3 compost/sand to a depth of 18 inches. Several conifers were planted in this area, along with nu-



Pinus strobus 'Soft Touch' by stairway corner

merous alpine plants, to test their resilience in such a sparse, well-drained soil. The conifers survived successfully for the first four years (100%) but this spring I lost 10 conifers, mostly *Picea* and mainly from the scree area. I am surmising that the hot, dry summer followed by a very cold winter was the cause even though the garden is out of the drying wind, has good drainage and had a consistent snow pack over the winter.

This loss of plants brought me to a new realization – why I belong to the Conifer Society and go to the meetings. I



Two pines as corner posts for the stairway.
Pinus densiflora 'Jane Kluis' and *Pinus strobus* 'Soft Touch'

was able immediately to replace the de-funct conifers because I had squirreled away a number of plants in my own garden. These were plants I was tempted into bidding for at the meetings, as well as a number of unusual plants that were two-year grafts courtesy of Marvin Rumpler, who facilitated ordering them a couple of years ago. The motto – be prepared.

In summary, the walled area containing the reference garden has become a favorite passageway for faculty, students and visitors – a place where people gather, sit, study and browse. There are colorful conifers during the dreary winter months, a sequential blooming of various bulbs and rock garden plants during the spring and fall, and an abundance of flowers in the butterfly garden during the summer. Since the visitor center, greenhouses



Picea pungens 'Glauca Prostrata', *Chamaecyparis pisifera* 'Baby Ice Blue', *Chamaecyparis obtusa* 'Gold Fern'

Related Information

- A water supply was carried to the top of the embankment and this supply is connected to the drip irrigation and a separate hose for occasional hand watering. The irrigation system is drained for the winter.
- Drip irrigation is divided into 3 sections in order to maintain water pressure. A blue sprinkler is included in each section to indicate a functioning pressure and to remind workers to turn off the system at the end of the day.
- The greenhouse personnel oversee watering in the summer and help with some of the maintenance.
- Friends of Horticulture volunteers are responsible for regular maintenance and planting.
- A wooden box for brochures is incorporated into the edge of the garden.
- A listing of conifers and rock garden plants is available in the Visitor's Center
- Professional signs were made for each original conifer with a second round of signs slated for this spring.
- The conifers, rock garden plants and bulbs are mapped on different layers of a CAD program as well as listed in an Access database. The inventories are updated about twice a year.
- Yearly photographs are taken of individual conifers.



Ephedra minima

and educational garden are clustered together, visitors migrate easily from one place to the other. Weekends are particularly busy with families and photographers walking along the wall getting close up views of all the conifers and companion plants. At first, the garden looked somewhat sparse, but I would say that, this spring, the garden has finally come into its own.

The Wellesley College Botanic Gardens' Conifer Garden was accepted as a Conifer Reference Garden by the Northeast Region of the American Conifer Society in 2007, and the Society provided funds for additional conifers, signage, drip irrigation, brochures and student help. The Garden is used by students in horticulture, ecology and environmental studies programs, by the Friends of Horticulture docents for tours and talks, and in their Botanical Art program, and is open to the public 365 days of the year. For further information contact Mary D. Coyne, Ph.D., Professor Emerita (mcoyne@wellesley.edu) or Kristina N. Jones, Ph.D., Director of Botanic Gardens (kjones@wellesley.edu).



Sciadopitys verticillata 'Mecki'



Picea orientalis 'Skylands Prostrata'



Chamaecyparis pisifera 'Gold Pin Cushion' in foreground. *Chamaecyparis obtusa* 'Fern Gold' behind and *Chamaecyparis obtusa* 'Reis Dwarf' far right

Northeast Region Report

by Richard Dube



Garden of Robin Coleburn,
Photo by Robin Coleburn

From the beautiful, refreshing shores of Lake Champlain to the verdant, tranquil hills of the Northeast Kingdom, Vermont beckons you to the Northeast Region's annual meeting on September 9th and 10th. This is the first time ever that the annual meeting and garden tours will be held in the Green Mountain State, so come and explore Vermont's timeless beauty and the creative spirit of its conifer enthusiasts. We invite you to experience the varied and conifer-rich gardens, indulge in flavorful meals and spectacular scenery, participate in spirited auctions, and learn from our guest speaker and wizened members.

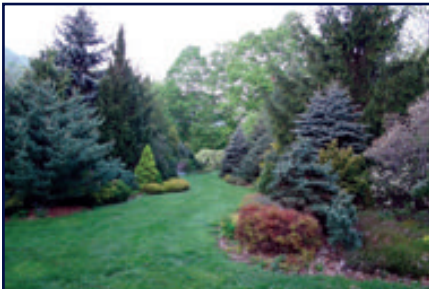
Friday night our keynote speaker will be **Richard Larson**, longtime ACS member and plant propagator at the Dawes Arboretum in Ohio since 1988. The Dawes Arboretum is well-known for its extensive conifer collection. Mr. Larson's talk will focus on marginally hardy or untried conifer genera that have performed well in Ohio.

Following a hearty breakfast on Saturday, we will board buses to tour four remarkable gardens. First stop is the gardens at **Golden Apple Orchard** which

overlook Lake Champlain and the Adirondack Mountains beyond. A formal walled garden was conceived as a transitional space between the house and the studio. This main garden is a series of rooms divided by hedges with each room having a different theme. There is an herb garden with Korean boxwood hedges, a central-knot garden flanked by perennial borders, a vegetable parterre and a conifer garden, among others. Over the years, the landscape has been expanded beyond this garden to include a substantial collection of dwarf conifers. They are inter-planted with herbaceous perennials in island beds which span several acres and which define the perimeter of the lawns and the remaining orchard. Owner Robin Coleburn has spent a few weeks this spring editing crowded conifers that have outgrown their spaces and rearranging many remaining treasures with very satisfying results. Sad that there were a few sacrifices, but elated that some plants became gifts, Robin admits, "Moving 20-30 year old conifers is not a task for the weak-willed or the weak-bodied."

Next we head to **Rocky Dale Gardens**, nestled in the western foothills of the Green Mountains. In 1981, Bill Pollard and Holly Weir developed the gardens in the style of Alan and Adrian Bloom of Bressingham, England. On the north side are stunning rock ledges, covered with *Polypodium*. Bill and Holly have created large island beds around existing hazelnut shrub masses with a wide variety of perennials. There are other island borders for conifers, small trees and

shrubs. Many of these wonderful conifer specimens are 20-30 years old. With no major renovations for many years, the gardens began to outgrow themselves and new owner Ed Burke has been removing the overgrown and failing shrubs to create inspiring vistas. Visitors can now appreciate the wonderful older specimens and see all the charming new varieties and specimens that have been planted. Rocky Dale's varied selection of outstanding conifers is especially admired by gardening enthusiasts and professionals alike.



Garden of Robin Coleburn,
Photo by Robin Coleburn

The Hidden Garden of Lewis Creek Road is the lovely site of our fantastic lunch and the third garden we will visit. This garden is laid out on two levels with the upper level surrounding the house. Curving paths wind through an extensive collection of *Hosta*, shrubs and perennials, and then lead over the lawn to a sunken garden. The sunken garden, partially hidden by *Ilex* hedges and crabapple trees, has lush plantings, a contemplative pool and handsome stonework. By taking a path under a canopy of mature conifers, or walking along a path that follows a watercourse planted with ferns and flowering shrubs, members can reach the lower garden. In the lower garden, collections of heather, ornamental grasses, damp-loving

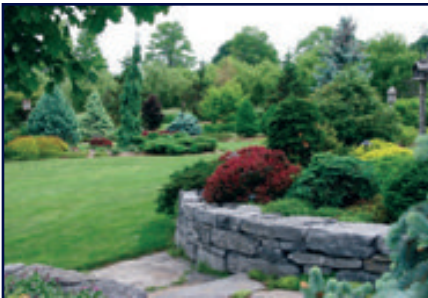
plants, conifers and water lilies have transformed a meadow into an abundant garden embracing a reflecting pond, a trout pond and a "fishing camp". This exceptional garden is one of Vermont's largest and finest private gardens.

Heading northeast past the Ben and Jerry's plant and through Stowe, we enter the "Kingdom" and arrive at our fourth amazing garden. Don Avery was first inspired by Greg Williams in the mid-1980's and began propagating and growing conifers at **Cady's Falls Nursery**. Don grafts small quantities of about 125 taxon with a special focus on the genus *Larix*. Today, conifers are an important part of the nursery's offerings, along with cold-hardy plants, which offer strong sculptural value in the landscape, and slow-growing plants for the rock garden. From diminutive rock and shady woodland to acidic bog and pond-side, the well-groomed gardens contain many old specimens, including numerous dramatically sculpted weeping larch. A portion of the growing field is being transformed into an arboretum for larger plants. Whether stunningly displayed or harmoniously inter-planted, conifers play a prominent role in Cady's Falls magical display gardens.

Saturday evening brings the opportunity to outbid each other at the silent auction during social hour. As the bidding nears a frenzied end, frantic participants jostle to make final offers on coveted needle-bearing treasures. A tasty dinner followed by the exciting and high spirited live auction rounds off the evening as members creatively carry and cart off their prized coniferous winnings. Of course, to complete the weekend of total plant gratification, Sunday morning will

bring tailgate sales to help fill any vacant space left in your vehicles. For many members, the most cherished possessions are the memories of shared experiences and the opportunity to reconnect with fellow coniferites.

Start your journey early and view some of the pre- and post-gardens, or experience other pleasures northern Vermont has to offer. Enjoy a tasty treat on a trek to Stowe at the Ben and Jerry's Factory, or The Cider Mill and taste samples at the Cabot Cheese, or Lake Champlain Chocolate outlets. Quaint Stowe village offers high quality shopping, and a scenic gondola ride up Mount Mansfield inspires you with breathtaking views of the Green and White mountain ranges. Don't miss downtown Burlington and take a refreshing stroll on the boardwalk along scenic Lake Champlain. Historic Shelburne Farms, with its restored mansion inn and barns, and highly recommended Shelburne Museum, make a wonderful post-meeting excursion. Allow some extra time to make this Vermont trip an adventure beyond an inspirational meeting and garden tours, and into a stimulating week-end escape of exploration.



Rocky Dale Gardens
Photo by Ed Burke

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My Favorite Conifer: The Bristlecone Pines

Text and Photos by David Rasch



My favorite conifer is a 5-needled white pine that has become well-known in horticulture and is superlative in nature.

It is the bristlecone pine, consisting of two geographically-separated species: *Pinus aristata*, the Rocky Mountain bristlecone pine (RMBP); and *Pinus longaeva*, the Great Basin bristlecone pine (GBBP). The two species can be distinguished readily by the presence (RMBP) or the absence (GBBP) of white crystalline exudates from a number of resin ducts on the needles.

Many of us know the Rocky Mountain bristlecone pine as an accent specimen in containers or in rock gardens. The pine's use in smaller scale situations is due to its rather slow growth. Several varieties in the market enhance this use with compact habits, probably originated from witch's brooms.

The other of the two species has drawn attention to this pine's longevity. The Great Basin bristlecone pine is

known to live longer than other trees with a maximum age up to 5,000 years as measured by Donald Currey in 1964 from a tree that lived in an eastern Nevada glacial cirque.

Today, the oldest living GBBP, "Methuselah", discovered in 1957 by Edmund Schulman, and the largest living GBBP, "The Patriarch", are located in eastern California high in the White Mountains. The Inyo National Forest maintains a good gravel road to timberline and above within the Ancient bristlecone pine Forest preserve.

We learned from dendrochronologist Dr. Schulman that longevity through adversity is the key to this pine's old age. Centuries of slow and steady growth in this dry and exposed high-elevation environment are achieved with reduced threats from competing species, fire, insects, or decay. Indeed, the long dead snags lying on the ground may have been alive thousands of years before the



ancient living trees began to grow nearby. Timberline at 11,500 feet above sea level in the White Mountains has advanced and receded over the millennia and these trees have recorded it.

A science of comparison between

many pencil-thin cores of wood taken from both living and dead trees, known as cross-dating, has allowed researchers to more fully understand the climatic fluctuations in western North America for the last nine thousand years. The ancient



GBBP reveals these changes in its climate-sensitive tree-rings that are established with each growth cycle. The natural range of GBBP extends from southern Utah to eastern California, so this author enjoys periodic visits to see these magnificent pines in their native habitats.

There are remarkable Rocky Mountain bristlecone pines within a shorter and easier commute from home. The natural range of the RMBP extends within the eastern mountains of central Colorado to northern New Mexico and near Flagstaff, AZ. The oldest RMBPs were found by Craig Brunstein in 1991 growing in an odd location on a low, isolated peak in Colorado's South Park, known as Black Mountain. There on a steep, southeast-facing scree slope live several stunted pines that are up to 2,500 years old.

Even closer to home in northern New

Mexico's Carson National Forest, Valle Vidal Unit, the largest RMBP lives within the recently established Upper Ponil Botanical Area. Here, a handful of larger trees betray their status with brightly colored reddish-orange bark on massive 3 to 4 foot wide trunks that set them apart from their smaller gray-barked brethren.

Each summer after the winter snows have melted away and dirt roads have become passable, the ability arrives for journeys into these special sites where bristlecone pines thrive. Only then can we appreciate how harsh living conditions are mastered by these trees and that the pretty little plants in our gardens have the same time-tested genetics that could allow them to survive like their ancient relatives throughout the mountains of the American West.



Celebrating Conifers in the South

Text and Photos by Rona Bathea

A query of local nurseries or a survey of Georgia gardeners would in all likelihood produce predictable results. The “usual suspects”, traditional plants of the South, including *Azalea*, *Camellia* and *Hydrangea*, remain the local favorites. So a garden devoted entirely to conifers is a definitely a departure from the norm, perhaps even stepping out over the edge.

Gardens on the Green, a public garden in Gainesville, Georgia has done just that. The recently completed conifer garden is a small jewel of a garden within a larger garden situated on the grounds adjacent to the county’s Board of Education. It has become a landmark in Hall County and is maintained by a very proactive 150-member- strong Master Gardener group in a joint venture with the Hall County school system.

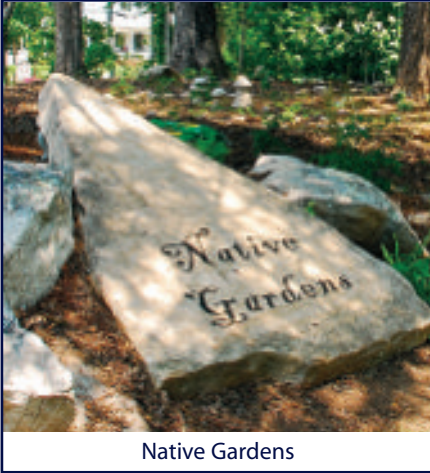
The Gardens is actually a composite of mini-gardens connected by pathways of lush green grass, each garden high-

lighting a different category of plants or gardening style. They include a native plant garden, a “winner’s garden” featuring plants that have been awarded a Georgia Gold Medal, and a vegetable garden set underneath decades old *Liriodendron*, known commonly as tulip poplars, oaks, and a towering Canada hemlock. In 2009, Mr. Lee Lovett, Deputy Superintendent with the Hall County school system and his wife Kathy, both active members of the Hall County Master Gardeners, worked to expand the Gardens to encompass a garden dedicated to and celebrating conifers. Kathy was instrumental in acquiring the funding and contracting the late George Winstead as its designer. Together they laid out a plan for this very out-of-the-ordinary garden.

Among and between the Gardens’ sections are trails or paths of grass, brick, stepping stones, or mulch which encourage visitors to explore each. The conifer



Gardens on the Green, Gainesville, Georgia



Native Gardens

garden is no exception. A path circles from the entrance past a massive mountain laurel to the opposite side of the garden and back again on a ridge raised high above street level. George Winstead passed away in late 2009, just after he had acquired some of the conifers he intended to use. Lee and Kathy then sought the help of others in the local plant community to finish what they had started. My husband, Harry Bethea, a member of the American Conifer Society and owner of a Georgia plant nursery specializing in conifers, has been delighted to be part of the effort, overseeing acquisition, planting, and labeling of the specimens that stand completing George's vision.

When visitors to the Gardens arrive they may park and enter the Gardens passing a quaint cottage-like structure that serves as a storage shed for garden tools. A striking Japanese black pine (*Pinus thunbergiana*) stands alongside this cottage. While many Georgians think only of native loblolly pines (*Pinus taeda*), when or if they think of conifers at all, this lone conifer is the first they see. It provides them with a hint of what lies ahead across

the garden green.

The conifers in the garden were chosen to highlight the differences in shape, texture, and color of the many varieties of conifers available locally and adapted to the demands of our environment. There are tall specimens including two soon-to-be-tall Japanese cedars (*Cryptomeria japonica* 'Yoshino'), a golden Atlas cedar (*Cedrus atlantica* 'Aurea'), and a deodar cedar (*Cedrus deodara*) which screen and define the boundaries of the conifer garden. These plants may be "standard fare", but they are also very reliable plants for southern gardens since they are tolerant of Georgia's heat and humidity. In between these pillars are more unusual plants that demonstrate just how varied and unique conifers can be.



Cedrus deodara and the administration building

A contorted, dwarf Japanese cedar (*Cryptomeria japonica* 'Tansu') with its very short and dense green needles sits at an angle to the entryway-defining boulder. Directly behind the boulder is a new addition, a yellow twig Japanese cedar (*Cryptomeria japonica* 'Yellow Twig')

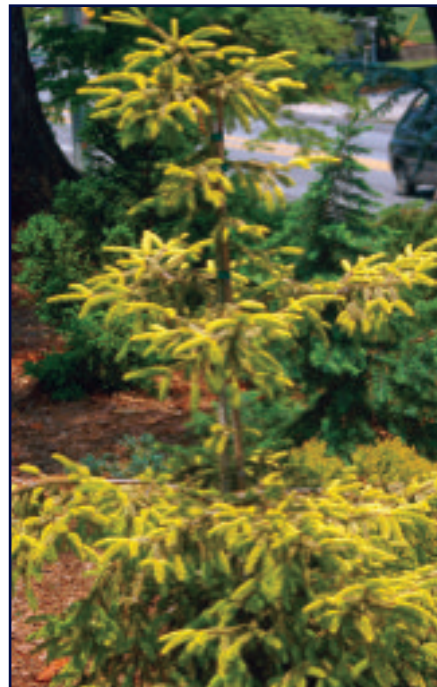


Cryptomeria japonica 'Tansu' and
Juniperus horizontalis 'Gold Strike'
with a memorial rock

that should grow to a medium height. It features fine textured needles which have a light yellow cast in the spring.

Other boulders are “planted” at intervals along the path to provide contrast and a structural element. Low growing, gold-tipped juniper (*Juniperus chinensis* ‘Daub’s Frosted’) are situated next to powder-blue juniper (*Juniperus squamata* ‘Blue Star’) along one side. A graceful, dark green Japanese cedar (*Cryptomeria japonica* ‘Gyokuryu’), takes advantage of one of the more protected areas of the garden and is planted to provide eventually another boundary pillar and to tease the passerby by forcing them to walk around the plant to enter the garden from the “back door”. There are numerous yellow conifers in the garden to keep the palette changing. They include a golden spruce (*Picea orientalis* ‘Skylands’), three orange-yellow colored arborvitae (*Thuja occidentalis* ‘Rheingold’), and a like number of gold-tipped Hinoki falsecypress (*Chamaecyparis obtusa* ‘Nana Lutea’). The latter are juxtaposed against two semi-prostrate blue deodar cedars (*Cedrus deodara* ‘Feelin’

Blue’) which arch up and above the Hinoki cypress at intentional odd angles beyond which a standing stone is placed, providing just a touch of Japanese artistry in the garden. Interested observers can compare the blue, very wide and pendulous branches of the ‘Prostrate Beauty’ deodar cedar (*Cedrus deodara* ‘Prostrate Beauty’) that sits just across the path to the still horizontal ‘Feelin’ Blue’ deodar cedar that bears an occasional upright branch.



Picea orientalis 'Skylands'

Throughout the garden, the plants are sited such that they can be viewed from almost every angle, allowing visitors to study the differences between them and to select their favorite for potential planting in their own garden. Nevertheless, the design also provides sufficient room for the specimens to mature and fill in the space

between them in years to come. Another Japanese black pine (*Pinus thunbergiana* 'Thunderhead') is a favorite, and we look forward to the day when its large candle-adorned clusters of needles take on the storm-cloud appearance for which this plant is known. The weeping Norway spruce (*Picea abies* 'Pendula') stands in sharp contrast with its side-hugging branches, except for a single odd-angled arm that arches out toward the street. It should eventually tower above the dwarf and miniature plants that populate the garden and itself be sheltered by the Japanese cedars at maturity. Then the garden will have walled itself off and formed an altogether different, but no less rewarding experience.



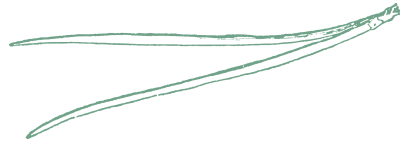
Cedrus deodara 'Feelin Blue'

We would say to Lee, Kathy, and many of the Master Gardeners who help maintain the garden, that they have struck gold – the Gardens is host to many seeking a quiet spot in the shade or an idle walk along the paths. On a recent day, when we came to add new plants to the garden and help prune and tidy up, there

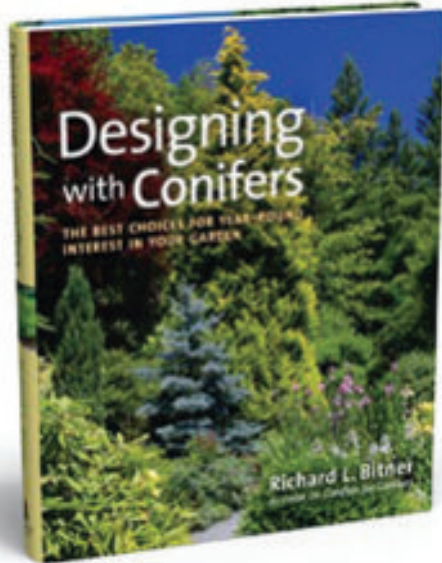
were over 60 elementary school children, part of the thriving Junior Master Gardeners program, either ambling about in groups or sitting in temporary outdoor classrooms learning to identify and grow plants of all types. Three new 'Gold Strike' junipers (*Juniperus horizontalis* 'Gold Strike') under the plaque bearing George's name were, we thought, an appropriate addition and a tribute to George and all those who contributed to the Gardens.



Picea abies 'Pendula'



Designing with Conifers: The Best Choices for Year-round Interest in Your Garden, by Richard L. Bitner; 296 pp, hardcover, Timber Press, 2011



Richard L. Bitner is on an admirable and noble mission: “to promote the appreciation and garden use of conifers.” *Designing with Conifers*, his third book on the subject, succeeds, to a large degree.

Much of that success is due to the lavish use of excellent photographs (taken by the author, who also happens to be an anesthesiologist). Large color pictures of so many unusual varieties of conifers in beautiful garden settings are sure to inspire almost anyone who has the urge to play in the dirt. Likewise, the descriptions of hundreds of these plants should send many readers scurrying out to the garden centers. The problem is, they will most likely draw blank stares from clerks who never even heard of a *Cupressus nootkatensis* ‘Pendula’ or *Cephalotaxus harringtonia*, by any of their names:

promoting “appreciation” is one thing, but promoting “use” is tough if the plants are not readily available.

The book is organized in a practical, gardener-friendly format, with primary emphasis placed on shape and color. These two sections are followed by discussions of conifers for specific sites and conditions, and then an interesting and revealing case study of one specific garden. It closes with seven appendices, ranging from the eminently practical (“Coping with Deer”) to the oddly esoteric (“German Grave Plantings”).

Many of the discussions lead to encyclopedic listings of species and varieties, with mixed results. For one thing, the sheer volume of possible candidates for the home landscape will be an eye-opener for the average homeowner who thinks “evergreens” are Colorado blue spruces or arborvitae. At the same time, those pages of terse, 2-3 line descriptions — each headed by the often daunting italicized Latin name, and most, of course, not pictured — might also make that average homeowner feel overwhelmed by the options. And, as already mentioned, for many who might be intrigued by the possibilities, the question is likely to be, “Great, but where can I find any of these wonderful trees?”

Readers in Zones 3 and 4 might also be frustrated by the lack of hardiness information. The author often notes that certain varieties are “hardier than the species,” but that is of limited use when the hardiness of the species is not given.

On the other hand, there is a chapter on conifers for the South.

There are brief but interesting chapters on dwarf conifers, railway gardens, topiary, bonsai, and “Asian-style” gardens. (The author abjures the use of “Japanese” gardens if the plants, and the design, are not authentically Japanese.)

Interestingly, he also appears to disdain the American Conifer Society and its members. He refers to “crazed coniferites who collect conifers for the sake of collecting. They keep careful acquisition records and diligently place weather-resistant labels by each plant in the garden. Their collections have year-around interest but little else to offer except the satisfaction that comes from having every last cultivar of the common Norway spruce (*Picea abies*) and comparing notes with other collectors at Society meetings. Not unlike stamp collecting.”

He suggests that bonsai enthusiasts join a club, implies that railroad gardeners are not passionate hobbyists (like stamp collectors), but conifer collectors are “crazed coniferites”? Very interesting.

I am not aware of any other “society” dealing with conifers he might be referring to — and oddly enough, he is an ACS member himself — but this certainly doesn’t jibe with my personal experience, nor does it describe the gardens visited during ACS functions. Not surprisingly, ACS is not mentioned specifically at all, even though its mission statement aligns pretty much with the avowed mission of the book.

This book’s greatest value to ACS members could be if it ignites some discussion about that mission statement, the role of conifers in garden design, and

ways not only to promote conifer appreciation, but to increase *availability* through member nurseries.

This will not be the most important book in your conifer library, but it is pleasant to look through, and it could be an interesting and useful reference. —
Jerry Belanger




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Miniatures



1 – *Abies procera* 'Blue Witch'

2 – *Pinus uncinata* 'Parade Cushion'

3 – *Picea abies* 'Pusch'

4 – *Taxus baccata* 'Golden Dwarf'

Photos and captions by Robert Fincham

Conifer Road Less Traveled – Part 2

Text and Photos by Tom Cox

Several years ago I had a discussion with Dan Luscombe with the Bedgebury Pinetum in Kent, England concerning where one might find the most remote conifer in the world. In that context, we were talking about “naturally occurring” (*in-situ*) as opposed to “introduced” (*ex-situ*). Dan thought that the most remote was likely *Juniperus brevifolia* from the Azores. Since we have successfully grown its close relative *Juniperus cedrus* from the Canary Islands, I began to search for a source for *J. brevifolia*.

While on the subject, another thought arose: “Where would one likely find the most remote place on earth where a conifer might be growing?” In doing some research, I discovered that it just might be Ascension Island. Prior research indicated that a grove of Norfolk Island pines (*Araucaria heterophylla*) had been planted there in the mid 1800’s and, if so, this just might be the spot.



Araucaria heterophylla

For those who might not be familiar with the name, Ascension is an isolated volcanic island in the equatorial waters of the South Atlantic Ocean, around 994

miles from the coast of Africa, and 1,398 miles from the coast of South America, which is roughly midway between the horn of South America and Africa. Given its isolation, it is one of the most remote places on earth. The nearest landmass is the island of Saint Helena which lies approximately 800 miles to the southeast. Saint Helena was made famous as the island where Emperor Napoleon I was exiled.

Presently, Ascension is a British overseas territory which is chiefly used as a joint facility of the United States Air Force and the Royal Air Force, a European Space Agency rocket tracking station, and the BBC World Service Atlantic Relay Station. The island was used extensively by the British military during the Falklands War and, interestingly, it hosts one of five worldwide ground antennas which allow the Global Positioning System (GPS) navigational system to function. No one is allowed to own land there, and all residents (approximately 900 total) are employed in some form of support role. Travel to the island is very restricted, and we were only able to go there on a Space Available basis as I am a U.S. Army retiree.

After first obtaining necessary clearances from both the British and U.S. Air Force authorities, we were granted permission to travel there. On February 7th, 2011, Evelyn and I departed from Patrick Air Force Base, Cocoa Beach, Florida, bound for Ascension Island where we would spend 9 nights. Stopping first on the island of Antigua in the Caribbean,

where the United States also has a tracking station, we then had an eight-hour ride to Ascension. After a turbulent flight that made it impossible to sleep, we arrived at 4:30 a.m. and were met by Air Force personnel who made us welcome and provided lodging. My first recollection was the eerie quietness of the pre-dawn hour. All around, we could see faint images of volcanic mountains that we would later explore.

Upon arrival, I spotted two mature Cook pines (*Araucaria columnaris*) growing on the U.S. base and immediately concluded that the literature had misidentified these as Norfolk Island pines (*Araucaria heterophylla*). That is a common mistake in Florida and in the nursery trade as almost all plants in the trade and in landscapes are not true Norfolk Island pines. There was both excitement in immediately discovering a conifer as well as disappointment in not finding the true species which I had only seen twice before.

One of the most talked about “must-see” destinations on the island was the highest mountain. At 2,800 feet, Green Mountain offered an interesting contrast to the surrounding barren peaks. To put this all into perspective, it is necessary to step back in time to a famous botanist named Joseph Dalton Hooker (1817-1911). Before travelling to Ascension in 1843, Hooker had the opportunity to meet Charles Darwin, who had also briefly stopped there during his famous journey aboard the *Beagle*. Hooker later succeeded his father as Director of the Royal Botanical Garden, Kew. Although his visit to Ascension was brief, it was to have a profound impact on what was largely a barren island and it led to an ex-

traordinary transformation of the island’s flora. Prior to the establishment of a British garrison on Ascension in 1815, only 5 of the 10 endemic conifer species were recorded as extant.

Hooker proposed to plant trees on the higher levels in the hope of increasing rainfall (average 4-5 inches per year). He also wished through the plantings to help soil formation on the steep valley sides and to conserve moisture. As a result of his recommendations, a gardener was appointed with instructions to obtain as many suitable plants as possible. From 1850 and continuing year on year, ships came, each depositing a varied assortment of plants from botanical gardens in Argentina, Europe and South Africa.

After a day spent recouping from jet-lag and observing endangered green turtles (*Chelonia mydas*) come ashore after dark to deposit their eggs, we rented a car and set out for Green Mountain. As a side note, this was the first time I had ever rented a car and did not have to show a driver’s license. The island is reminiscent of my childhood. No one locks their door, keys are left in cars overnight, and virtually everyone you pass waves.

We had been warned that the drive to the top was treacherous, but nothing prepared me for the severity of the numerous switchbacks and sheer drop on the passenger side. As we climbed, the flora became thick, and, at the top, we found ourselves in a cloud forest. About $\frac{3}{4}$ of the way to the top the road ended and we had to walk. To our amazement and delight, almost immediately we spotted two additional conifers that were unexpected – *Juniperus bermudiana*, a highly endangered species from the island of Bermuda and *Podocarpus elatus* from eastern Australia.

All specimens were extremely healthy and were likely as large as they get anywhere in the world.



Juniperus bermudiana

Several days later we were driving out to an abandoned NASA site from the 1960's that had been built there in support of the Apollo Deep Space mission. We were told we would pass a stand of what everyone referred to as "The Pines" which supposedly had been planted to supply masts for ships. Driving along a lonely road I spotted a grove of trees in a canyon situated between two mountains. You all know about highway horticulture, and I immediately found a pull-off. It was about an hour before sunset when we began our hike up what, at one time, was a steep road that was now completely washed out. Distances were always farther away than estimated and we arrived at the grove as the last bit of light was hanging on. There was a perfectly healthy stand of true Norfolk Island pines which had existed there for well over 100 years. It was interesting to observe that they were reproducing, and that the grove was slowly expanding. I was humbled in their midst. It was fascinating to conjure up images of them being planted in the mid 1800s and to imagine that someone way back then possessed the knowledge to

know where to plant them. There was not even one dead limb to be seen. With Evelyn nervous to get to our car before complete darkness, I paid my respects and then headed back. I vowed that we would visit again before we flew home.

The next day we were led on a five-hour hike up to the top of Green Mountain by a kindly gentleman named Don Avilez, who is one of two air traffic controllers employed by the Air Force. In his 70's, Don is a *phenom* who showed no difficulty in the rugged climb – I cannot say the same. He displayed great patience as I had to take a plant photograph every 20 feet. This was a veritable plant oasis with numerous plants which were familiar to me such as *Buddleia*, *Lantana*, *Clerodendrum* and bananas. As we descended down from another direction at somewhere around 1,000 feet, the scene reminded me of I-75 through Tennessee, except, instead of *Juniperus virginiana* (eastern red cedar), the area was dotted with *Juniperus bermudiana*. As compared to those at higher elevations that were at least 30 feet tall, none of these were over 6 feet. Permission was later granted by the Conservation office and cuttings of both this and *Podocarpus elatus* were collected and delivered to Dr. Chad Husby at the Montgomery Botanical Center in hopes of providing new germplasm.

The next day I made an appointment to meet with Ms. Olivia Renshaw, who is responsible for the conservation of both flora and fauna on the island. She later took me back up Green Mountain in a Range Rover. Even though the vehicle was too large to make the sharp hairpin turns without some maneuvering, it was obvious this was not her first rodeo. Near the top she showed me their propagation

facility where rare and endangered plants such as the critically endangered fern *Pteris adscensionis* are being grown for reintroduction. I pointed out the *Podocarpus* and *Juniper*, and, on our way back to her vehicle, I spotted what appeared to be several pines perched on a steep hillside. They were impossible to get close to and I suggested they might be *Casuarina* sp. (imposter pine) which one sees all over central and southern Florida. When we returned to her office, we checked their database and discovered that these were *Pinus roxburghii* from the Himalayas. Now looking at the photo, I am a bit chagrined to have missed the ID as a *Pinus* sp.

In all, we found five conifers in this remote part of the world. Before people arrived, it was home to just a flightless bird, a land crab and no more than 10 species of plants, none as large as a bush. It was so barren and isolated that, over the three centuries of empire-building following its discovery by the Portuguese in 1501, no nation bothered to claim it. It was the experience of a lifetime to visit and, even more so, in discovering conifers in such isolation.



Juniperus bermudiana



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Wintering Potted Conifers in a Sunroom

Text and Photos by Wynne Keller

About ten years ago, we added a sunroom to our home, and I have used it to bring a large number of plants through the winter. Most of these are normal houseplants, but a few are conifers. When I started doing this, I did not know that a conifer needs a dormant period in the winter. When I found this out some years later, I became interested in just why my experiments in the sunroom may have been successful.

My Setup

The sunroom has a gas heater that we set as low as it will go, which is 50°F. The temperature drops to 48 before the heater turns on. If the sun is shining and the wind is not blowing, the temperature

can climb to comfort range and we will go out there for a short while to enjoy thumbing our noses at winter. But as the sun gets low, the temperature falls steadily back to the heater-maintained limit. Apparently these brief interludes of warmer temperatures are not sufficient to induce the conifers to come out of dormancy.

My potted conifers are *Juniperus chinensis* var. *sargentii* (as a bonsai) and *Cryptomeria japonica* 'Spiraliter Falcata'. The juniper has been wintered only a few years, but the *Cryptomeria* has been with me at least 7-8 years. I keep the plants adjacent to the glass, but, as is typical of sunrooms, the glass does have glazing that reduces UV light. I



Cryptomeria japonica 'Spiraliter Falcata', Christmas 2006

water lightly as needed. I have even pressed the *Cryptomeria* into service as a diminutive Christmas tree occasionally.

The plants seem to be dormant (in that they are not actively growing) until the days get noticeably longer in early February. I believe a combination of factors may be in play here. First, I leave the conifers outside as fall sets in, allowing a touch of light frost. When I bring them in, I try to do it during the warmth of the day so that there is no shock going from outside to inside temperatures. Second, perhaps the 48-50°F heat is significant, as opposed to the 60° that Dr. Elardo used (*The Editor's Corner: Conifers as Houseplants?*).

Dormancy Research

I have spent a little time on the Internet trying to find more information on dor-

mancy. As is typical with Internet research, a wild variety of opinions may be found. Some websites even claim there is no such thing as dormancy in a conifer. Writers differ on what temperature is necessary to maintain dormancy. One article I read said that 50° is sufficient to maintain dormancy. Most articles claim one must have the temperature around 40°

The period in fall of shortening days and colder nights is important for inducing dormancy. The process of going dormant begins in late summer. Different species may respond differently to the stimuli of day length and cold, but apparently once dormant, a chilling period requirement must be met before they can successfully emerge from dormancy. Brent Walston at Evergreen Gardenworks says this period is six weeks



Cryptomeria male cones



Cryptomeria top view of young female cones

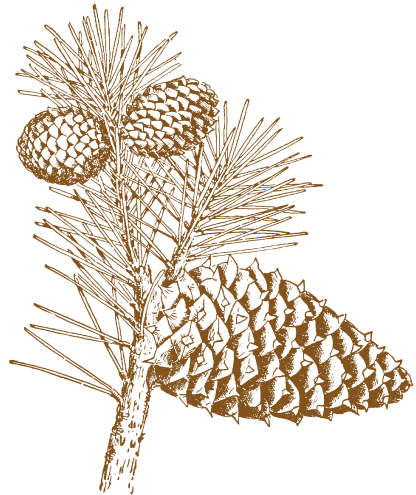
(<http://www.evergreengardenworks.com/dormancy.htm>). Would leaving the plants out longer in the fall help ensure that the dormancy requirements are met? I may be bringing mine in too soon. Brent asserts that no winter protection at all is needed if temperatures don't go below 15F (-10 C) (<http://www.evergreengardenworks.com/overwint.htm>).

Andy Walsh's excellent article on wintering bonsai (*Freeze Damage in Woody Plants*, <http://www.evergreengardenworks.com/frzekill.htm>) summarizes the results of his research with these rules:

- Allow the plant to cold harden properly, including exposing it to the first frosts of fall.
- Store the plant in an appropriate environment (the article has more details on

how to provide "appropriate") with a temperature between 34-50°F (1-10°C).

- Return the plant to its outdoor environment when normal growing temperatures return.





Sunroom in November

Publication Dates

Issue	Calendar Quarter	Deadline to submit articles	Publication Date (approx. mailing)
Winter	Jan/Feb/Mar	Nov 22	Jan 15
Spring	Apr/May/Jun	Feb 15	Apr 15
Summer	Jul/Aug/Sept	May 15	July 15
Fall	Oct/Nov/Dec 31	Aug 15	Oct 15

Submit articles/photos to:

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The Editor's Corner Whaddycallitgardening®

by Dr. Ronald J. Elardo, Photos by Steven W. Courtney

Some gardeners describe themselves as “over-planters” and then “thinners” (Steven W. Courtney). In other words, they pack in as many plants as possible to achieve instant gratification, with the idea that later they will move plants from beds as space and growth demand. The result is a marvelous patchwork quilt of trees, shrubs and perennials. This type of ordered chaos is not just the hallmark of the Elardo Garden at Hidden Lake Gardens, it is characteristic of my own garden at my home and also my own personal landscaping taste. I call it *Whaddycallitgardening*. Why “whaddycallit”? My Italian grandma, Mamie, filled in her English vocabulary with the phrase. For me, it means that anything goes when the gardener chooses to “eye-scape” their garden. It’s the x-factor with regard to seeing beauty as Immanuel Kant wrote in his *Critique of Pure Reason*. Each person *sees* beauty in their own way. *Whaddycallitgardening* is both freedom of vision and choice.

So? What does that have to do with conifers?

Several years ago, as my conifer addiction began to burgeon, I started collecting conifers. My first major haul came at of all places, Hosta College, the annual gathering of the Great Lakes Hosta societies in Picqua, Ohio in March. I had never been exposed to large-scale plant sales before. When I saw all those plants, I began to fall in love. I happened upon the Girard Nursery display and I met Al Forinash. There must have been a

hundred conifers of all shapes and sizes to choose from. Before I knew it, I had laid claim to about 30 *baby* conifers. I brought them home and planted them where I saw fit. The conifers were placed to please my vantage point. I paid little attention to location. It was simply a matter of instant gratification. My second and third years at Hosta College netted me even more conifers. In fact, by the third year, Al even sent me home with 48 trees. Or, I should say that I gleefully stuffed my truck with new foster children for my personal garden. Some of the trees made their way into the Elardo Garden at Hidden Lake, but the majority took root at 5749 Hunter Court, Adrian, Michigan.

My own patchwork quilt grew leaps and bounds with additions from local nurseries, Gee Farms and Rich’s Foxwillow Pines. The more I stuffed, the fuller the beds became. Blues, golds, multi-colored leaves, then purple cones, red cones, black cones, rose-colored ones—the color palette was and is truly mesmerizing. Then something began to happen. Nature took its course, and the trees not only thrived, but they took on a life of their own. Scots pines went from darling babies to adolescents. One footers went to four- and five-footers. Something had to give. I began to find new homes for the erstwhile babies. Friends and neighbors were immediate benefactors and then I discovered a large cache of pots in my utility barn. Glazed, clay, and plastic pots of varying shapes, sizes and colors from

my days as an avid houseplant collector. As my conifers moved from their own nursery beds out into the garden, some of them made their way into pots.

I thought: "If conifers can survive as houseplants, why not propose to plant lovers everywhere that, regardless of the space they have to grow plants, everyone can *conifer-garden*?" I had to move trees from the front edge of my front deck. A 'Jean's Dilly' went into a larger bed, while a *Picea glauca* 'Conica' entered a pot. Two large blue Atlas cedars took up sentinel status on either side of the garage door with *Picea glauca* 'Conica', *Tsuga canadensis* (Eastern Hemlock), *Pinus densiflora* 'Oculus draconis' and *Pinus strobus* 'Caboose' at their feet. Near the garage-door sit three more pots, one with a *Pinus nigra* 'Oregon Green', one with *Chamaecyparis obtusa* 'Confucious' and

another containing a *Taxus baccata*. On the front deck, the adventure continues.

The array of homes for my deck conifers equals the number of plants there. Hinoki cypress form the majority species. I am raising several *Chamaecyparis obtusa*: 'Filicoides Compacta', 'Confucious', 'Graciosa', 'Dainty Doll', 'Little Ann', 'Tempelhof', 'Nana Gracilis' and 'Ellie B'. There is a *Cryptomeria japonica* 'Compressa', and, next to it an *Abies koreana* 'Silberperle'. *Cupressus nootkatensis* 'Glauca Pendula' resides in an octagonal shaped pot. To compliment both the color of the pot and the plant, I juxtaposed *Pinus sylvestris* 'Bonna', which was planted in the ground. Once I freed it from my clay soil, it rocketed new candles and is truly resplendent. *Picea pungens* (Colorado spruce), which wintered indoors, is spending the summer



The entrance to my home with *Pinus virginiana* 'Wate's Golden' to the left and *Pinus densiflora* 'Oculus draconis' to the right

outside with Christmas and Thanksgiving cacti.

The *indoor* conifers I had written about in the Spring CQ have moved onto my northeast-facing deck. *Cryptomeria japonica* 'Black Dragon', two *Sciadopitys verticillata*, *Cunninghamia lanceolata* 'Samurai', *Cryptomeria japonica* 'Sekkan-sugi' and *Araucaria columnaris* have joined a massive, 30-year-old, *Ficus benjamina* to create a mixed, multi-textured palette and a really nice sitting area.

For conifer-gardeners interested in container-gardening, taking care of the plants and their containers as fall and winter approach is critical. All conifers need to experience the cold and frosts as they

set buds and themselves react to dropping temperatures. Those in clay pots will need to be protected because the pots will crack with thawing and freezing. My clay-potted conifers will spend the winter in an unheated, three-season porch. Those in cedar and plastic pots will nestle together in the corner of my southwest-facing deck.

In the meantime, enjoy a different way of conifer-gardening as I am. Collect some pots, go conifer-shopping, plant up the conifers, set the pots, move them around and watch the conifers thrive.

Ron



From left to right. *Cryptomeria japonica* 'Compressa', *Chamaecyparis obtusa* 'Ellie B', *Abies koreana* 'Silberperle'



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Expedition into the Altai Mountains – Part 2

Text and Photos by Jörg Kohout and his team

Translated by Dr. Ronald J. Elardo

Viel Komfort hatte unsere Jurte nicht zu bieten. Außer vier Feldbetten und einer schmalen Holzbank gab es nichts. Es gab auch keine Elektrizität oder Wasser. Zum Glück hatten wir Akkus zum Wechseln für unsere Kameras. Daran sollte man übrigens immer denken, wenn man in solch dünn besiedelte Landstriche geht

Our yurt afforded us little comfort. With the exception of four sleeping bags and a small wooden bench there was little else. There was no electricity or running water. Fortunately we had extra power packs for our cameras. You have to think of those things when you are out in sparsely populated areas.

The next morning's sunrise proved to be spectacular. After we had gathered a few branches for the fire, we brewed our



Abies sibirica

morning tea. We were then able to begin



The Ural, our transportation

our trek up to Sewero Uliski Chrebet, the 4,000 meter high mountain range. With the Ural, a gasoline powered truck, we could ford rivers and traverse narrow roads up to the base of the glacier. There are only gasoline powered vehicles in Siberia because the winters are so cold and diesel fuel freezes.

Along the edge of the road we discovered our first witch's broom, a *Pinus sibirica*. After approximately a one-hour drive we reached our goal, a small camp site on the shore of a river. There we ran into several travelers who had made the effort to admire the ancient wall paintings of prehistoric shamans. Our attention was, however, not on the glacier or the wall paintings, but rather on the ancient conifer forests which, seen from stands of *Larix decidua*, dominated the landscape. As the slope of our climb became ever steeper, so much so that we had to climb using our hands, we decided to go back and look for witch's brooms at lower elevations. On the way back to our truck we found four brooms.

When evening came, our Ural picked us up and we headed back to our yurt. We stopped midway to pay homage to the spirits which inhabit the forest and the land. In the Altai region shamanism is widely practiced. It even stretches into Mongolia and northern China. We willingly allowed ourselves to be guided by this belief system and the hospitality of the indigenous people. We tied colored silk banners to the branches of the trees to free ourselves of evil thoughts and to bring good fortune to ourselves and our families. Such are the tenets of the religion of the region.

In der Altairegion bis hin in die Mongolei und Nordchina ist der Schamanismus weit verbreitet. Gern ließen wir uns von diesem Glauben und der Gastfreundschaft der Einheimischen leiten. Also banden wir Schleifen aus feinem Tuch an die Zweige der Bäume. Dabei macht man sich frei von allen schlechten Gedanken und wünscht sich Glück für sich selbst und die Familie. So verlangt es der



Sewero Uliskii Chrebet



Sunset at Sewero Uliskii Chrebet

Glaube.

In the evening we sat in a circle around our campfire and watched an incredible sunset. Never in my life had I

ever seen a more beautiful one. Our sherpas sang songs into the night surrounded by absolute quiet and blanketed in the darkest darkness.

On the next morning we headed toward Aktasch. We left the ancient conifers and larches behind us and entered a valley forested primarily by *Picea obovata*. Similar to *Picea pungens* in the mountains of Colorado, the *obovata* bear a mantle of gray-green to luminous blue needles. It was in these spruces that we discovered several beautiful witch's brooms.

Our goal was to reach a campsite near the small city of Aktasch where there was an asphalt road which we knew would make our journey easier. It is the only road that runs through the Altai Mountains and connects the city of Novosibirsk and Mongolia. We pitched a tent for the night and were able to purchase a couple of hours of electricity from a nearby generator for a few rubles. The generator was started up just for us so that we could recharge the depleted power

*Picea obovata* on the way to Aktasch



Picea obovata in the vicinity of Aktasch

packs for our cameras.

The next night was very cold. We crawled into our sleeping bags and, even though we had insulation mats on the ground, warm clothes and a sleeping bag, I was pretty miserable. I cannot say exactly whether it was the cold or my backache from the hardness of the ground that made me miserable, but I have to confess that the night seemed like it

would never end. The cold gripped me so much that my sleep was disturbed and once awake I could not fall asleep again. Because of the dryness of the air it was very warm during the day. But, when nightfall came, the autumn cold drove temperatures to 0° C.

Thus, the morning of the next day reminded us of the pervasive cold until the rising sun spread its warmth. We made the decision to remain close to the base camp and there, close by in the cliffs, we discovered a witch's broom. We continued our searches and found on the next day a total of 12 witch's brooms in spruces. It was because of me that we spent the greatest amount of time on the hunt for the brooms. The brooms hung some 30 meters up and it took time to ascend the trees and then to get back down again. It did not take me very long to put on the harness for rappelling and to wear it. The witch's brooms were very prevalent in this area. There was a small forest near the cliffs. Everything fell into place and we found many new brooms in a very



Climbing to reach the witch's brooms



Through the moors to the
"Blue Eyes" of the Altai

small area.

In the afternoon we ended our search

in order to visit two small wetland lakes near our camp. The locals call these lakes the "blue eyes" of the Altai. A small path led us through the swampland to the lakes. A couple of wiggly, slippery boards served as our bridge over the crystal-clear streams which flowed through the moor. Regular shoes do not work in traversing the moor. The lakes are a really wondrous attraction and should be visited by anyone who comes to this area. The floors of the lakes are blue, and it seems probable that there are a variety of seascapes and vegetation which cause this color to occur. Since the waters of the lakes are crystal-clear, the lake floor is illuminated azure blue. We stayed a while in order to appreciate the beauty of the lakes and to enjoy the absolute peace of the place.

We had to return to our base camp in the late afternoon. Our transportation was waiting for us. Back at camp we stayed for about thirty minutes until we departed once again. We decided to spend the rest of the day looking for witch's brooms.



the "Blue Eyes" of the Altai

Actually, we made a terrific find in a *Picea obovata*. We found a supermini. Even though it was several years old, it was no bigger than a human hand. Right away I got my harness on and went after getting that super witch's broom. When we got back, our truck was waiting for us so that we could begin the next phase of our journey.

Tatsächlich machten wir einen ganz tollen Fund in einer Picea obovata. Ein echter Supermini. Obwohl er schon einige Jahre alt war, war er kaum größer als eine Hand.



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Jörg Kohout with his "supermini", *Picea obovata*

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Dr. Al Paulsen

by Ron Elardo



The American Conifer Society has sadly lost one of its pioneers. Dr. Albert G. “Al” Paulsen died on February 10th at his home in Falls Church, Virginia. As reported in *The Washington Post* by Lauren Wiseman March 10, 2011 ET, “[Al] was a Naval Reserve rear admiral who ran a dental practice in Falls Church from 1954 until he retired in 2000.” He joined the Navy in 1942 and served his country at the National Naval Medical Center in Bethesda, Maryland and then later in theater in China during World War II. He retired from the Navy in 1977.

Al’s academic preparation spanned three institutions. He received his undergraduate degree from Loyola College in Baltimore (1942). His dental degree was awarded by Georgetown University (1945); his masters degree in dentistry

came from Northwestern University (1950). He held an associate professorship at Georgetown University from 1945 until 1990.

Ethan Johnson has written that: “Al Paulsen was a favorite of mine. He was a gentleman in every sense of the word. He loved conifers and the ACS – the twinkle in his eye and his bright smile were a most welcome sight. I would often seek out his company when touring gardens or at ACS events.” Ethan observed that Al encouraged younger gardeners and ACS members.

In the *Southeastern Conifer* (June 2011), Maud Henne has reminded us that Al had long been involved in conifers. After his retirement he established his nursery in Great Falls, Virginia where he sold mostly conifers. As Maud writes: “He was instrumental for setting up conifer collections in Meadowlark Gardens and Green Spring Gardens in Northern Virginia. And according to my knowledge donated the plants.”

Maud’s photo of Al, wearing his ‘landmark’ tropical helmet, depicts the man as many ACS members will always remember him.

We all stand on the shoulders of those who have gone before us. As a veteran, a dentist and a coniferite, Al’s shoulders were broad indeed.

Next Issue: Fall 2011

Our next issue will feature "Me and my favorite conifer".

Conifers are an amazement over which we and nature share stewardship. They are such unique plants that surprise all who stop by to sojourn. The themes proposed are meant to inspire and to inquire. Whether you are a novice, an explorer or a connoisseur and you have a story to tell – a favorite conifer, pictures (please note photo requirements on the Editor's Message on page 4), plant care, problem solutions, a new hybrid or cultivar, we want to hear from you. We welcome any interpretation or addition to the main themes we offer.

Future Issue Themes: Please look at future themes and consider sending your articles in advance of published deadlines.

- Defending the Garden against Deer and Rodents (Winter)
- How I got hooked on Conifers! (Spring)

We at *Conifer Quarterly* welcome news alerts about conifers or about our members.

Contact Dr. Ronald J. Elardo (conifereditor@yahoo.com) to discuss your ideas.



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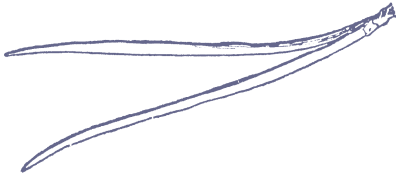
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Abies koreana 'Silber Mavers'
Photo by Dennis Groh



Chamaecyparis obtusa 'Emilie'
Photo by Dennis Groh