conifer

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CONIFER *QUARTERLY*

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Cedrus deodara 'Snow Sprite',
Cary, NC.
Photo by Sandy Horn.

Inside Cover Photo
Picea sitchensis 'Papoose',
Bayard Cutting Arboretum,
Iseli Memorial Grant Garden,
Great River, NY.
Photo by Heather Coste.

Back Cover Photo
Tsuga canadensis 'Sargentii' drooping over the waterfall,
St. Louis, MO.
Photo by Bruce and Chick Buehrig.

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President's Message - Spring 2021

David Olszyk

Welcome to spring! It's always a great relief to see the yearly cycle present itself in such a predictable manner, the subtleties of which have been exacerbated by the extended sequestration, courtesy of COVID-19. It's been very encouraging to hear that the global vaccination efforts continue at such a fast pace. Everybody clearly wants to see the end of this pandemic, if for no other reason than to get back to the business of of meeting and socializing.

In this issue, you'll come to realize that some parts of the world lack the dramatic seasonal variability that many of us enjoy. I enjoyed reading Axel Kratel's exploits as he systematically tries to bring temperate conifers to Hawaii. Up until now, whenever I thought about the relationship between conifers and Hawaii, my thoughts always went to tropical conifers. Keep up the good work, my friend. Hawaii is clearly a paradise and a unique test center.

Sadly, we bid farewell to a giant among us. Marvin Snyder was an ACS Past President, a benefactor, and a friend to many. Regrettably, I never met him in person, but his impact on the ACS will live on forever. Rest in power, sir.

Moving forward, I'm happy to announce that during a recent meeting of the Board of Directors, we voted to approve the development of a major website upgrade, the long-anticipated Conifer Exchange, a peer-to-peer tool to allow our members to buy and sell anything conifer-related (plants, seeds, cuttings), with a portion of the transaction fees going to the Society. The goals of this program are twofold: enhanced revenue for the ACS, and, equally, if not more importantly, fun! I hope that the membership will widely adopt this program. I know I will.

Finally, I'd like to announce to you that August will mark the end of my third year as your President. It will also mark the end of my turn at the helm. This means that the ACS and its Board of Directors will need a new president. If anybody reading today is interested in an extremely rewarding and interesting experience, let us know. Past experience as a Board Director is helpful, but not required. If you have any questions or are interested in volunteering, please email the ACS Board of Directors at ConiferSocietyBoard@gmail.com.

Conifers in the Hawaiian Islands

Text and Photography Axel Kratel

For most people, Hawaii doesn't exactly conjure up images of conifers. That was true for me as well. As a plantsman, a big part of what drew me to Hawaii was all the amazing tropical plants that can be grown here. To this day, I have a very healthy interest in palms and other exotics. However, never in my wildest dreams did I ever think that I would end up in Hawaii trying to grow conifers, let alone farming Christmas trees, i.e., conically shaped conifers. I spent most of my adult life in Santa Cruz, CA, taking conifers for granted. They grew everywhere and formed backdrops without my paying much attention to them.

However, fate landed me on a farm in the cloud forest in the mountains above Hilo, which is sandwiched between the upper limits of the tropical rainforest and the lower limits of the warm, temperate mountain climate that dominates the vast majority of Hawaii's landmass. A not-so-well-known fact about Hawaii is that over 80% of the archipelago is at elvations above 1,000 feet elevation, and falls into the same USDA Zone as Alaska's Zone 1, which includes parts of the Aleutian Island chain, Kodiak Island, and the coastal islands near Juneau. In Zone 1 in Hawaii, temperatures never rise above 86°F, ever. In fact, at any given time of the day, it's rare to see the thermometer exceed the low 70's. Our farm turns out to be a paradise for orchids, bamboo and, well, as you probably have guessed by now, conifers.

It didn't take me much time to notice the conifers around Hilo, but after a while, I began to fall in love

Cryptomeria forest.

with the giant, towering old cypress trees that were planted long ago all over our farm. *Cupressus lusitanica* (Mexican cypress), a common windbreak tree on the Big Island, thrives in our cool, wet climate. Most of my neighborhood features so many of this species that there is quite a range of forms to admire. These trees awoke a long dormant curiosity within me that took me right back to my childhood, when I grew conifer seedlings on my windowsill. If *C. lusitanica* grew here, what other conifers would, too? Down the rabbit hole I went.

Suddenly, just like magic, conifers throughout Hilo began to reveal themselves to me, many in places where they had been all along, right under my nose. Japanese cedars (*Cryptomeria japonica*), Japanese black pines (*Pinus thunbergii*), Italian cypresses (*Cupressus sempervirens*), Himalayan cedars (*Cedrus deodara*), all sorts of cultivars of Hinoki cypress (*Chamaecyparis obtusa*), and Chinese junipers (*Juniperus chinensis*) appeared out of the ether, some well over 50 to 100 years old. Japanese immigrants who came to Hawaii to work the sugar cane fields brought these conifer treasures from Japan. Their journey gave me such an amazing head start, a rich palate, from which to choose. I knew these species would be happy growing here in Hawaii. Japanese cedars are by far the most abundant conifer species in Hawaii and seem to have the broadest adaptation profile. We find *Cryptomeria japonica* thriving from almost sea level all the way up into the 7,000-foot range above sea level. We've observed viable cone production as low as 1,200 feet.

Picea chihuahuana (Chihuahua spruce) specimens.

Abies firma (momi fir) specimens.

I eventually met Aileen Yeh, who runs one of the main forestry nurseries in Hilo. She's one of our local conifer enthusiasts and has spent the last 20 years researching which Christmas trees can grow in Hawaii. In the beginning, most of the work took place above 6,000 feet on Mauna Kea, where most spruces (*Picea*) and firs (*Abies*) are known to thrive. The lack of farmland and the inaccessibility of that site drive the need to test out Christmas trees at lower elevations. Most farms in Hawaii are below 3,000 feet, and much of that growing area does not suffer from extreme winter cold. It features ample rainfall, acidic soils, and cool, growing conditions where temperatures above 80°F are rare.

Among conifers that don't need severe winter cold, the Cupressaceae family members reign supreme. Even species from the highest possible latitudes,

Cupressus lusitanica (Mexican cypress).

such as Nootka cypress (*Cupressus nootkatensis*) from Alaska, thrive in our climate. Studies done on Pacific Northwest conifers and their sensitivity to global climate change confirm that western red-cedar (*Thuja plicata*) and other members of the Cupressaceae family do not experience bud break hindrance from lack of winter cold. The small handful of commercial Christmas tree growers in Hawaii already figured this out and have been producing Leyland cypress (*Cupressus* × *leylandii*) and Arizona cypress (*Cupressus glabra* var. *arizonica*) on a commercial scale. They have also begun incorporating both western red-cedars and eastern red-cedars (*Juniperus virginiana*) in their Christmas tree fields.

However, the one conifer presence that you never see in Hawaii is the classic northern Christmas tree. Spruces and firs are conspicuously absent in Hawaii, outside of the Christmas tree trials on Mauna Kea. The only reason we can figure is that no one has bothered to try them. Historical records reveal many trials of conifers in Hawaii for forestry and lumber, but the lists usually don't include many spruces and firs. The one notable exception is Norway spruce (*Picea abies*), which is so successful that it is now considered an invasive species on Maui. There is a scattering of Douglas-firs (*Pseudotsuga menziesii*) around Hawaii, but they're rather unusual to find.

Our farm is running trials on a number of firs and spruces to find candidates that will thrive above 1,000 feet elevation where it's wet and where summer temperatures rarely rise much above 81°F. The trials are complex. Not only are we looking for candidates that grow well in the absence of cold winters but will also tolerate our wet soils and grow fast enough to be viable Christmas trees. They must also be able to hold their needles without going from the dormancy normally triggered by winter chill. So far, the most promising candidates include the momi fir (*Abies firma*), the Chihuahua spruce (*Picea chihuahuana*) from Mexico, and the Santa Lucia fir (*Abies bracteata*) from Monterey County, CA.

One of the most interesting discoveries that we have made is that, ironically, of all the species with obligate chill needs, the species with the least chill requirements turn out to be the most northerly

Cupressus lusitanica.

species, or the ones from the highest elevations. This finding is consistent with work done in the 1970s on trying to establish a Douglas-fir seedling orchard in Monterey, CA. The seedlings that grew the least abnormally, due to the mild winters, were grown from seed collected higher up in the Sierra Nevadas. The downside of these accessions from higher elevations is that they're not heat-tolerant. However, this is not a limiting factor above 1,000 feet elevation on the windward side of the Hawaiian Islands.

It may come as a surprise that much of the interest in conifers seems to involve temperate species, as opposed to the many exotic tropical species that would thrive in Hawaii. This comes mostly from the fact that people who live in the tropics are bombarded with tropical landscape plants day in and day out, so that temperate conifers are actually a welcomed change in scenery. This is probably why most of the low elevations are planted *ad nauseum* with the ubiquitous Cook's pine (*Araucaria columnaris*), hybridized with Norfolk Island pine (*Araucaria heterophylla*), resulting in perfect, tall, triangular shapes.

Sadly, here in Hawaii, there isn't much of a nursery industry built around tropical conifers. Most of them are difficult, if not impossible, to obtain in Hawaii and, generally, can only be found in collector gardens. Thus, most of the tropical conifers are rather rare in Hawaii. The few *Agathis atropurpea* (blue kauri) and rare araucarias are well hidden. We hope that the work we do at Heavenly Hamakua Farms will change all of this. We hope some of the rarer tropical conifers will become more readily available and that we can find some spruces and firs that can grow alongside the abundant cryptomerias, araucarias, cypresses, redwoods (*Sequoia sempervirens*), and Hinoki cypresses that are already abundant in the lower elevations in Hawaii. We've not talked much about pines, for which there's a long and tenuous history in Hawaii, as recent fires around Haleakala have spurred massive pine seedling growth, but that will be for a future article. There is so much to cover, and we hope to touch on the various genera in future issues of **CONIFER***QUARTERLY*.

Dr. Axel Kratel runs Heavenly Hamakua Farms, which is home to the Kikala preserve and the Kikala Institute for Regenerative Agroforestry. The farm grows Christmas trees, and the Institute manages the preserve, which includes a growing collection of conifers from around the world. Dr. Kratel has a Ph.D. in Physics from Caltech and has shifted his scientific acumen to focus on botany and regenerative agroforestry, in order to find the optimum intersection of biodiversity, agricultural productivity, carbon sequestration, and soil regeneration.

Araucaria columnaris (Cook's pine).

Walking Among the Great Basin Bristlecone Pines

Text and Photography Jack Christiansen

Bristlecone pines struggle to survive. Part of this tree is still alive.

California's Great Basin has always been a special travel destination for me. Its amazing scenery is a photographer's dream. The terrain is a mix of striking contrasts. There are snow-covered mountains that rise up 14,000 feet above sea level and then slope down to the chaparral of the Great Basin Desert. This rugged, yet magnificent area is home to *Pinus longaeva* (Great Basin bristlecone pine). They cling to life in the upper crevasses and valleys of the White Mountains, the highest range in the Great Basin. That is where the adventure begins.

Getting to the bristlecone pines is no easy task. The road just outside the town of Big Pine, CA, takes visitors up to the Schulman Grove, which is a windy, steep, 50-minute drive. Because of the dramatic change in elevation, you're likely to find yourself quickly out of breath, lightheaded, and wondering why it takes so long to change out your regular shoes for hiking boots.

The new Schulman Grove Visitor Center and facilities at the ranger station were closed for the season. However, the trails that my wife, Linda, and I planned to hike were all open. Information boards on the trails spelled out in detail all that we needed to know to begin our four-and-one-half-mile hike. The information on the boards is what I have included in this article.

The Schulman Grove is best known for a specific *Pinus longaeva,* The Methuselah Tree. The Methuselah is considered to be one of the oldest living things on earth. It is estimated to be 4,852 years old. The US Forest Service does not identify the tree for fear that visitors might vandalize it. Among the older trees, newer stands of young, vibrant *P. longaeva* exist in various stages of growth. A second, graded, dirt road leads visitors to the Patriarch Grove, home to the world's largest Great Basin bristlecone pine, The Patriarch Tree. The base of its trunk is approximately 18 feet in diameter.

As we walked along the trails, we learned that California is very fortunate to have many older, giant trees, but few come close to the age of the Great Basin bristlecone pines. Genetics favor their longevity. They are tough. They live in a harsh, unforgiving, high-mountain environment that few other trees could endure. Frigid cold, sand, and blistering, high winds sculpt the trees. These elements chisel away a lot of the living material of the trees. What is left is wood fiber that is extremely hard and reveals deep veining. The veining

This tree has succumbed. It's a macabre remnant of what once was.

The roots hold the trees in place against the ravages of nature.

feeds the trees, making them resilient to destruction and pathogens. *Pinus longaeva* can survive with only 10% of live veining. That is why most of the older trees have only small clumps of needles. The trees also have a thick coating on the needles and branches that protects them.

Most conifers shed their older needles at least every four to six years, but Great Basin bristlecone pines can hold their needles for up to 40 years. Many of the other great, older trees of the world often fall victim to forest fires from lighting strikes. The Bristlecone Pine Forest is relatively impervious to fires because there is little underbrush around the trees that can fuel and spread fires. There is only extremely rocky, infertile, and highly alkaline soil that makes it difficult for other trees and plants to survive and to provide tinder.

Pinus longaeva are monoecious conifers. A cone may take two years to develop. A pollinated cone often times turns a beautiful purple color with large amounts of glistening resin that eventually turns brown and flakes off. As this happens, the cones release their winged seeds.

These pines have helped scientists rewrite the history of our earth. The rings of these trees preserve a living record of past weather patterns, volcanic eruptions, fires, and even floods. Overlaps in the tree-ring patterns of living trees and those in long-dead ones identify climatic and environmental events going back to the last Ice Age. Wood from the Schulman Grove bristlecones has also provided a way to correct the errors of carbon dating. The earth's carbon levels have changed with environmental events of past history, and the trees reveal the markers of these events.

For those interested in growing *Pinus longaeva* in the home garden, there are limitations. According to *Gardening Know How,* this species of bristlecones needs some protection from high winds until their roots anchor deep

in the soil. This deep root structure makes them hard to transplant. They are hardy in USDA Zones 4 through 7, but they won't have the same lifespan as those *P. longaeva in situ*. The weather conditions in the home garden prevent the trees from developing the amount of hard wood that gives them their longevity. They are born and bred for the rigors of the hostile environment that helps them to attain their long life.

Whenever I hike among these trees, it is always a spiritual experience for me. It's as if I were walking on the sacred ground that supports these famous, enduring trees. Throughout the Ancient Bristlecone Pine Forest, you can see trunks that fell long ago, still lying peacefully on the ground like beached whales. They are evidence of past centuries long gone.

The morning that we were there was bright and sunny. There was not a cloud in the sky. On the trails, we stopped at many points along the way to take in the surroundings and to catch our breaths. Off in the distance, we could see the northern region of Death Valley far below. The trails at various times were narrow and steep, but not impossible to navigate. We could look out to the higher peaks of the area and see other *Pinus longaeva*, all framed by white, dolomite rock.

Unlike many forest trees, Great Basin bristlecone pines take on many unique shapes. You'll never see two alike. What stood out for me most were trees that were completely dead, but still standing. They are statuesque. They rise up to the sky with their gnarled, naked branches. Of all living things, trees hold for me a beauty in death that rivals their beauty in life.

After several hours, our hike neared its end. We were tired, but glad that we had ventured out to see and experience the rugged beauty of this area and its ancient trees. It was time to go back to our car, in order to make our way down from the mountains. We would continue our road trip to Death Valley and, eventually, the Grand Canyon.

Looking into the forest of bristlecone pines. It's like a moonscape of trees.

Sculpted wood shows the remains nature has left.

Iowa Outdoor Garden Rendezvous – June 12 and 13, 2021

Text Randy Dykstra, Gary and Tom Whittenbaugh

A scene from the Bickelhaupt Heartland Collection. Photo by David Horst.

The ACS's Central Region canceled the 2021 National Convention and associated Conifer College because the events included several indoor gatherings and bus travel that could not provide for adequate social distancing during the COVID-19 pandemic.

However, Iowa members are planning an alternative two-day, open-air garden rendezvous to take place in the Clinton/Quad Cities area in mid-June, 2021. For this event, there will be no indoor activities or bus travel.

This year's event will be the 21st Annual Iowa Garden Rendezvous. It will include most, if not all, of the gardens that were planned for the 2021 National Convention. ACS members will have the chance to meet each other, talk plants, visit gardens, take pictures, get ideas, and just have a good time in a safe manner during these trying times.

Tom Whittenbaugh with a centerpiece he made for the auction at the rendezvous. Photo by Gary Whittenbaugh, his brother.

A selection of the centerpieces made by Gary and Tom Whittenbaugh. Photo by Gary Whittenbaugh.

This year's rendezvous will be on Saturday, June 12, and, for those with available time and interest, the rendezvous will include Sunday, June 13, in order to visit all the available gardens.

True to past rendezvous, this year's event will be very informal. Attendees will receive a rendezvous souvenir handout folder. This will have names of the gardeners, maps with directions to the gardens, and the times the gardens will be open. Attendees will be responsible for their transportation, meals, and lodging costs.

Those attending this rendezvous will assemble at a designated garden and receive a box lunch, the only cost to attend the rendezvous.

Registration is required. If you would like to receive more information concerning the event or an event registration form, please send a brief email to Gary and Tom Whittenbaugh at franmara@mchsi.com

Remembering

Text and Photography Bob Fincham

I purchased my first conifers in 1974. My late wife, Dianne, and I had just built a new house in the town of Lehighton, PA. We wanted to do our own landscaping. I had always been interested in plants and gardening. So, I looked forward to the project. I went to a large retail store in Allentown and bought an assortment of conifers for year-round enjoyment. They were mostly Pfitzer (*Juniperus* × *pfitzeriana*) and Hetz (*J.* × *pfitzeriana* 'Hetzii') junipers that were common, cheap, and unsuitable for where I placed them. What can I say? I was a neophyte and had a lot to learn.

Later on, I made a real discovery when I saw some junipers in one-gallon containers at a garden outlet store. They were prostrate and had patches of pure white foliage scattered throughout the standard, green needles. I thought they were the "cat's meow". In other words, I thought they were great. I bought six of them to scatter throughout the new landscape. They were *Juniperus chinensis* 'Expansa Variegata' (intensely variegated Chinese juniper). At the time, they were called *Juniperus davurica* var. *expansa* 'Variegata'. I have had one or more of these junipers in every one of my landscapes, including here in Puyallup, WA. Not only are they attractive plants, but they also have a lot of memories attached to them. They played a major role in getting me into the world of conifer collecting.

A conifer garden is a place of unforgettable memories, especially if the gardener selects and places the plants. A collector's garden, be it conifers, maples, or some other plant genera, has many plants associated with an assortment of special memories. Our Puyallup garden has fewer than 200 conifer cultivars on less than an acre. I chose conifers based on appearance and memories. I even have some large-growing selections too because the memories they provide are extraordinary.

Joe Burke is coming out of his greenhouse during our visit. Eddie Rezek, on the right, is about to enter the greenhouse to dig out 'Burke's Red Variegated'.

Pinus densiflora 'Burke's Red Variegated' (Burke's Red Variegated Japanese red pine) brings back several pleasant memories. It generally produces attractive, bright yellow bands on its needles (never red ones). Even though, in some years, its color is very bland, especially here in the Pacific Northwest, it still has a special place in my garden. One of my first purchases of a rare conifer in 1974 was, in fact, the parent plant of 'Burke's Red Variegated'. It was a swap. My late friend, Joe Lankalis, and I visited Greg Williams's old Wolcott, VT, nursery. There were unusual conifers everywhere on the grounds. While visiting with the new owner, I started talking about the anthracite coal regions and fern

Pinus densiflora 'Burke's Red Variegated' in the Garden of Gary Gee, Stockbridge, MI.

fossils. I ended up trading a fern fossil for 'Burke's Red Variegated' and also got one *Pinus densiflora* 'Oculus Draconis' (dragon's eye Japanese red pine).

The other memory tied to 'Oculus Draconis' involved several friends who had gardens on Long Island, NY. I would visit them several times each year. One of them, Joe Reis, became a close friend. During one visit, he told me a story about his *Pinus densiflora* 'Oculus Draconis' seedlings. He grew a batch that developed pink bands every winter, at least for the first three or four years. After that, they were just yellow. Then he told me about some seedlings grown by Joe Burke that had the same trait. One of them went from red to pink after five years. Joe Reis figured it was temporary. However, Joe Burke thought it was a new mutation and kept it stashed in the back of his greenhouse.

Eddie Rezek wanted that plant in the worst way. He offered Joe Burke all kinds of cash for it, but to no avail. Then one winter, after I moved to Oregon, I brought some nurseryman friends back east on a scion collecting trip. We visited Eddie and then made our way to Joe Burke's place. Joe was excited to see us and learn all about the Pacific Northwest. He'd always planned to live there, in order to "avoid the radioactive fallout from the coming nuclear war". He had even bought an old camper that was parked in his driveway to serve as his abode and a quick getaway.

We had a terrific visit, and Joe Burke was so happy that he sold us some plants from his private collection. Eddie rooted around in his greenhouse and found the pink seedling. Joe had either given up on it or had forgotten about it. Eddie bought it for a few bucks. He put the name *Pinus densiflora* 'Burke's Red Seedling' on the plant. It has never shown a trace of pink variegation for me, but it does have bright yellow variegation. I have to chuckle every time I pass it in my garden.

Pinus parviflora 'Ogon janome' (golden bull's eye Japanese white pine) is another pine that I have been growing and enjoying for 37 years. I have several memories every time I look at it from our deck. I first learned about this plant around 1980 when I saw almost a hundred 'Ogon janome' of various sizes scattered around Joe Burke's nursery. I always wanted one, but he would not part with any. Then in 1983, I had my opportunity. That was an exciting year. It was the year of the first annual conference of the American Conifer Society. Several of the people I knew from Oregon flew out to attend. The conference was in Washington, DC. Jean Iseli, Dick Bush, and Cindy Lou Pease spent a week with me after it. We rode out to Long Island. I drove, and we stopped to pick up Tom Dilatush along the way.

We met Eddie Rezek and went on to see Joe Burke, where Jean Iseli saw the *Pinus parviflora* 'Ogon janome' plants. He could not stop talking about them.

Pinus parviflora 'Ogon janome' in the Garden of the late Bill Janssen, Battle Ground, WA.

Picea pungens 'Yvette' in the Jean Iseli Memorial Garden, Boring, OR.

Picea orientalis 'Tom Thumb Gold' at Iseli Nursery, Boring, OR.

He wanted one in the worst way and told Joe to name his price for one. Joe started dancing in a circle, with his hands in the air. He always did that when negotiating. Joe just could not restrain himself and grabbed a three-gallon plant. He told Jean it was a gift. Jean looked at it and asked Joe for a smaller plant to carry on the plane. Joe put it back down and gave Jean a one-gallon plant. They were both happy. I asked Joe if he might be willing to part with the three-gallon plant and if he would take $150.00 for it? He did his little dance, looked at me, and handed me the plant. I had never paid so much money for a plant before, but I was happy. It was unavailable anywhere, and Joe was the only collector on the East Coast that had it. Jean and I discussed that visit and that cultivar many times before he died in 1986.

I associate Jean Iseli with many of my conifers. When I look at *Picea pungens* 'Yvette' (Yvette Colorado spruce), I think of Jean and his younger daughter, Yvette, from whom the plant gets its cultivar name. Yvette would give up her room for me to use whenever I visited. Another plant, *Picea orientalis* 'Tom Thumb Gold' (Tom Thumb Gold Caucasian spruce), evokes a fond memory associated both with Jean Iseli and John Verkade.

I was in Jean's office in 1985 while he was speaking on the phone to John Verkade about 'Tom Thumb Gold'. One of Jean's sales staff had noticed this witch's broom on a *Picea orientalis* 'Skylands' (Skylands Caucasian spruce) that was growing in a New Jersey homeowner's yard. Unfortunately, it had already been claimed by John Verkade. Jean was trying to get plants from John and was having no luck. He was disappointed. I called John when I got home and did some trading. I managed to get three plants from him. I think that loosened John up a bit because he then also shared some with Iseli Nursery, including 'Tom Thumb Gold'.

The parent plant, *Picea orientalis* 'Skylands', reminds me of the many evenings and Saturdays I spent with Layne Ziegenfuss. Layne lived ten minutes from my Lehighton home and was my mentor during my early conifer collecting and propagating years. He told me stories about 'Skylands' and other cultivars. We often sat under his magnolia tree on summer afternoons and drank beer. I remember spending a winter's Saturday morning in front of his little coal-burning stove while he grafted conifers.

One of the plants I got from Layne was *Picea pungens* 'St. Mary' (St. Mary Colorado spruce). I have always had one in my garden, and it is still my favorite dwarf Colorado spruce. One winter, I was cutting scion wood from Layne's stock plants. There were six inches of snow on the ground. I saw where someone had trampled all over his 'St. Mary' stock plants. The following summer, we talked about that cultivar. Layne mentioned that the original broom was still alive, but that the propagated plants only survived 20

Picea pungens 'St. Mary' at the late Dennis Dodge's place.

(l-r) John Verkade, Layne Ziegenfuss, and Greg Williams at the meeting to organize the ACS at the home of Joel Spingarn.

The Board of Directors at the first annual conference of the ACS. Dick Bush and Jean Iseli traveled with me to visit people on Long Island where Jean and I got *Pinus parviflora* 'Ogon janome'. Seen here are (l-r) Dick Bush, Ted Lockwood, Susan Martin, Eddie Rezek, Billy Swartz, Jean Iseli, Bob Fincham, Tom Dilatush.

years. He felt that that was a problem with some witch's brooms, including this one. I did not have the heart to tell him that the reason why his plants were dying was because they had been trampled.

On another occasion, I made a new friend who introduced himself to me by sending me a shipment of plants. There were five, one-gallon plants in a large carton from Oregon. The name on the box was Gordon Bentham. Gordon became a close friend, and two of the plants have always been in my garden. *Picea abies* 'Pachyphylla' (thick-needled Norway spruce) and *Picea sitchensis* 'Bentham's Sunlight' (Bentham's Sunlight Sitka spruce). Dianne and I exchanged visits with Gordon and his wife, Molly, several times over the years. I remember the visits whenever I see those plants in my garden.

I have made many friends during my 46 years of collecting, propagating, and sharing conifers. The memories are always with me, even though many of those friends are gone. I even wrote a book about them and the plants they introduced in *Gone But Not Forgotten* (Coenosium Press, 2016). I sincerely enjoy rereading it from time to time. It keeps those memories from fading. My friends had their quirks, as we all do. That just made them that much more endearing to me.

My garden is not just a garden full of conifers, maples, and beeches. It is a garden full of memories of people and plants. The next time you walk through your garden, I hope that you, too, enjoy many pleasant memories as you wander among your plants.

Marvin Snyder

Text Dennis Groh

Marvin was a special and talented gentleman. He was a member of the Greatest Generation, those G.I.s, who served in WWII. To better appreciate his entire life story, his obituary can be found online:

https://www.johnsoncountychapel.com/obituary/MarvinKinyon-Snyder

I first met Marvin in 1994. At that time, Chub Harper was the President of the American Conifer Society (ACS) and had recruited Marvin to serve as ACS Secretary.

Marvin served as ACS Secretary until he was elected ACS President in 1999. In mid-1999, Marvin asked me if I would be willing to serve as ACS Vice President. Initially I declined, but Marvin was persistent and persuasive, and I ultimately agreed. Once I was VP, he informed me I would also be serving as ACS Treasurer. I said: "Why didn't you inform me of this up front?" He answered: "If I had, you wouldn't have agreed to the job. Besides, it will help you better understand the budget when you replace me as President." Then he smiled.

While I served as an officer, I had an insider's view. It was only then that I was able to appreciate fully all the personal time and energy both Marvin and his wife, Emelie, were volunteering and devoting to the ACS. Marvin was an Architectural Engineer and was trained to pay attention to details. He organized the ACS's records and history and created its bylaws and procedures. These are tasks, which are not glamorous, are often unrecognized, but are necessary for the successful operation of any organization. The Snyders had a significant impact on shaping the organization of the ACS.

Marvin continued to serve as President until 2002 and then as Past President until 2004. In my opinion, his and Emelie's contributions and sacrifice during his 10 continuous years of volunteer service were critical to the ongoing survival and future success of the ACS. He was the right person at the right time. In terms of individual contributions, I believe Marvin and Emelie Snyder are the only ones who have done more for the ACS than Bob and Dianne Fincham. It was fitting that the ACS's Board of Directors voted in 2004 to rename the ACS Merit Award for Service, the Marvin and Emelie Snyder Award of Merit for Dedicated Support of the American Conifer Society.

You may also find this interesting:
https://www.youtube.com/watch?v=s7OXiq1UfCs

Marvin Snyder in his Garden in Overland Park, KS. Photo by Susan Mertz.

From The Editor...

What is Your Favorite Conifer?

Please send a photograph of your favorite conifer. It needs to be 1MB (300dpi) or larger in resolution and sent as an email attachment to CQ Editor, Ron Elardo (ConQuartEditor@gmail.com).

Also, write a short paragraph about why the conifer is your favorite, including its botanical name (genus, species, cultivar), and its location. Use Microsoft Word (DOCX) format for your paragraph.

Our first submission is from Russell Peterson, friend of Steven Courtney, ACS National Office Manager.

Pinus banksiana 'Uncle Fogy' (Uncle Fogy jack pine) has been growing in my garden in St. Michael, MN, right out my back window. It is dressed in snow in one photo and is framed by the trunks of a river birch (*Betula nigra*). In a more recent photo, the jack pine shows off its spring color. I took the photos. It's my favorite conifer because of its artistic shape and winter-resilience. Steven Courtney, who also has an 'Uncle Fogy' in his garden, helped me pick it out at a local nursery.

Picea omorika 'Pendula Bruns'

Text and Photography Adrian Bloom

A scene in The Bressingham Gardens.

The 'Pendula Bruns' legacy it is not as straightforward as you might think.

A fortuitous opportunity during World War I led to the introduction of *Picea omorika* 'Pendula Bruns' (Bruns weeping Serbian spruce). Heinrich Bruns, then head gardener at the Böhlje Nursery in Westerstede, Germany (no relation to Jan-Dieter Bruns, owner of Bruns-Pflanzen-Export in Bad Zwischenahn) was stationed as a soldier in Serbia at that time. He made contact with some local people who, later in the 1920's, sent him seeds of *Picea omorika* 'Pendula Bruns'. Not many conifer lovers know this fact.

I used various sources for some of the information in this article. The following quote comes from the noted German plantsman Gerd Krüssmann, one-time Director of the Dortmund Botanic Gardens and author of *Manual of Cultivated Conifers* (1985), Timber Press. In 1972, he wrote:

"The plants [known as *P. o.* 'Pendula Bruns'] in cultivation today no longer display the typical spire-shape. They are rather narrow, or widely conical, as is more commonly found in the lower altitudes of the native range. The wide-crowned type predominates in the plains where the seed is more easily obtained, and, therefore, less expensive than that taken from the spire-shaped plants of the high mountains." (Gerd Krüssmann, *Manual of Cultivated Conifers,* p. 198)

It may be that the wider-crowned type represents the selection called *Picea omorika* 'Bruns' and that most of those plants have been grown from seed. I have been lucky enough to see conifers in the wild in many places in the world. However, the terrain of the Tara Mountains, where both the narrow spires and weeping forms exist, is a difficult place to explore.

In the mid 1920's, Heinrich Bruns began his own nursery, and, among the seedlings that he had grown

Picea omorika 'Pendula Bruns' at Foggy Bottom.

from Serbian seed, some were narrow and distinctly weeping forms. One in particular was grafted, grown, assessed, introduced, and marketed in 1955 under the name *Picea omorika* 'Pendula Bruns'. There had been a few selections created with the name 'Pendula', which were also very narrow and spire-like. The novelty of 'Pendula Bruns' was that it had sharply falling branches that seemed to hug the trunk. Weeping branchlets, densely clothed with dark green, silver-backed needles, were an added attraction. As with most pendulous or weeping plants, grafted plants often had to be trained up, until a leading shoot decided to continue in a vertical direction.

The first U.S. nursery to have received this new selection from Heinrich Bruns was F. W. Schumacher in East Sandwich, MA. It was soon sought after and distributed widely. It would be interesting to trace the distribution of this cultivar in the United States. Heinrich Bruns Nursery discontinued trading in the late 1960s. Heinrich would be pleased that he and his nursery are in the history books for his distinctive selection of *Picea omorika*, if for no other reason. In hindsight, he might have saved us from later confusion by adding his name, Heinrich Bruns, and naming the tree *Picea omorika* 'Heinrich Bruns'.

Picea omorika, from Heinrich to Johann Bruns

The story passes to another Bruns, Johann Bruns, founder of Bruns-Pflanzen-Export, in Bad Zwischenahn, Niedersachsen, Germany, which dates back to 1876. It is now one of the largest nurseries in Europe and among the most famous in the world. The present head of the company is Jan-Dieter Bruns, great grandson of the founder.

It was obvious that other nurseries would want to grow the new conifer species for customers. Johann Bruns's propagation manager, Georg Hinrichs, was clever enough to purchase a large amount of seed from Serbian sources. If frozen in storage, the seeds could be taken out as needed year after year, so that, if a shortage arose, the nursery could continue to grow seedlings and sell this increasingly popular plant.

Not unsurprisingly, some of the seedlings raised by the nursery had narrow and weeping habits. Hinrichs recognized the potential merits of a weeping form in 1965 and started to graft this plant. It seemed obvious to him that it should simply be called *Picea omorika* 'Pendula Bruns', an apt description of the habit of the plant. This plant came to market, and being very similar to Heinrich Bruns's *Picea omorika* 'Pendula Bruns', confusion of identity occurred. Perhaps there would have been confusion in any case, but two cultivars with the same name ensured it.

So, finally, we have to accept that both forms are in cultivation. The information sheet from Bruns-Pflanzen-Export ends with:

"The *Picea omorika* pendulous forms selected by Heinrich Bruns, as well as the *Picea omorika* pendulous forms selected by Johann Bruns, are on the market as *Picea omorika* 'Pendula Bruns'. These two types of *Picea omorika* 'Pendula Bruns' have achieved special importance and are no longer detectable today as separate trees."

***Picea omorika* 'Pendula Bruns' as a garden plant**

The now 25-year-old specimen in The Bressingham Gardens, planted for my late brother Rob, attracts much attention. It is obvious that the tree makes for a striking and an unusual conifer. It has similar looks and stature to the weeping giant redwood, *Sequoiadendron giganteum* 'Pendulum', which is also at Bressingham. I believe that the root system of this 'Pendula Bruns' has kept it upright, since many pendulous trees can be knocked down by our strong, westerly winds. Our specimen is well over 32 feet tall and resembles a prehistoric T-Rex, visible from over 100 yards from each end of the garden. I suspect that, one day, it will arch over.

There are two younger plants in Foggy Bottom that can still be pruned and trained, and this is the point that gardeners should recognize when determining how to grow *P. o.* 'Pendula Bruns'. These trees grow slowly enough, so that gardeners can decide what they need their eventual specimens to do.

Reading these notes about the origins of *P. o.* 'Pendula Bruns' should help us understand that this Serbian spruce, in general, is a pretty tough plant, enduring harsh and inhospitable conditions *in situ*. The more narrowly shaped plants are found at higher altitudes, where their slender profiles mean that they are not so likely to be overwhelmed by heavy snowfall or blown over by strong winds. They are also able to withstand drier conditions, particularly in summer, than many spruces.

Named cultivars such as *P. o.*'Pendula Bruns', *P. o.* 'Nana' (dwarf Serbian spruce), and *P. o.* 'Bruns' (Bruns Serbian spruce) are propagated by grafting. This is most likely to apply to the narrow pendulous forms listed under the name 'Pendula' also. Species trees are more conical and slightly variable and are mostly raised from seed. They make for good background trees in large gardens. Look in most conifer books, and very few cultivars of *Picea omorika* are named. In fact, we might have the impression that there aren't very many cultivars. However, think again. In the *RHS Encyclopedia of Conifers,* there are a total of 63 *Picea omorika* cultivars listed.

Picea omorika 'Pendula Bruns' off in the distance at Foggy Bottom.

Picea omorika 'Bruns', Adrian, MI. Photo by Ron Elardo.

***Picea omorika* 'Bruns'— another Serbian spruce with a mysterious origin**.

This plant, which carries the Bruns name alone, is not known or grown by Bruns-Pflanzen-Export in Bad Zwischenahn, and its origin in Oregon, although relatively recent, is not entirely clear. Does it matter? Not really, but since I was researching *P. o.* 'Pendula Bruns', it seemed that 'Bruns' might well have come from Bruns-Pflanzen in Germany, as well. I have seen it in the Iseli Conifer Garden in Boring, OR, surrounding their offices. To my mind, 'Bruns' represents a good form of the more pyramidal-shaped plant. Its sharply upturned branches expose the silvery undersides of the needles, making it a distinctive clonal selection.

I consulted some old acquaintances and renowned plants people, and I would like to thank Paul Halladin of Iseli Nurseries and Horst Jeddeloh, an American cousin of the Jeddelohs in Edewecht, Germany, whose nursery, close to Bad Zwischenahn, can trace its roots back 800 years.

It could be that Oregon nurseryman Larry Stanley may have been the first to have grown *Picea omorika* 'Bruns' around 25 years ago. Paul Halladin saw the plant at the Stanley & Sons Nursery and was able to source young, grafted plants from Horst Jeddeloh for Iseli Nurseries, in order to grow them in larger pots for their national sales.

According to Horst Jeddeloh, it seems that both Larry Stanley and another legendary Oregonian nurseryman, Talon Buchholz, had this plant before Horst started grafting it. So, unless someone has a Eureka moment and remembers the mystery of how this plant was given the Bruns name, the mystery remains unsolved.

As an addendum, Jan-Dieter Bruns, head of the famous Bruns-Pflanzen-Export in Germany is not aware and does not believe that any plants or grafts of *P. o.* 'Bruns' were ever grown at his nursery or sent by them to the United States.

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Websites

Trees and Shrubs Online:
www.treesandshrubsonline.org / www.dendrology.org.

For more information about Rob Bloom and The Bressingham Gardens, please log into
www.thebressinghamgardens.com

My Favorite (Unexpectedly) Shady Characters

Text and Photography Sandy Horn

Closeup of Bruce Appeldoorn's unnamed mini Hinoki cypress.

In the world of plant-lingo, the accepted definition of "full sun" is six or more hours of direct sunlight per day. Common knowledge for pines (*Pinus*), spruces (*Picea*), firs (*Abies*), junipers (*Juniperus*), Japanese cedars (*Cryptomeria*), cypresses (*Cupressus*), false-cypresses (*Chamaecyparis*), dawn redwoods (*Metasequoia glyptostroboides*), and bald cypresses (*Taxodium distichum*), unless they are variegated (and sometimes then, too), is that they need full sun to thrive. Following that kind of logic, shady gardens would mostly contain Canadian hemlocks (*Thuja canadensis*), and arborvitae (*Thuja*), with the occasional *Microbiota decussata* (Siberian cypress), and a *Taxus* (yew) or two thrown in for variety.

I beg to differ. Here in the South, full sun is often too much for some traditionally full sun conifers and ginkgos (*Ginkgo biloba*), but they will tolerate and even thrive in part shade (four to six hours of sun per day) or even shadier locations. After all, in central North Carolina (zone 7b), "part sun" is at least as intense as full sun in Zone 5 or in the far milder, often cloudy, Zone 8 of the Pacific Northwest. What this means for us in the South is that we can grow a lot more conifers in shadier locations than the folks who write up the nursery tags say we can.

Appeldoorn's unnamed mini Hinoki cypress.

Cryptomeria japonica 'Pygmaea'.

After all, many nursery people propagate and sell conifers in the Northwest, Upper Midwest, and Upper Northeast.

You may be concerned that if you plant a full-sun conifer in part shade, it will become leggy and unsightly, or won't express its normal colors. Some will. I've found that *Pinus thunbergii* (Japanese black pine), for example, is happiest in full sun and has no trouble handling our brutal summers in the South. If you've had good success with a given species or cultivar in a sunny location, by all means, continue to site it there. On the other hand, if you've tried growing a species or cultivar in full sun and, more often than not, it dies, usually in the summer, then what harm could it do to try a shadier location?

This brief article profiles my favorite shady characters: conifers that have done just fine in more shade than recommended. I hope that perhaps my success with these trees will encourage you to experiment a bit. I love my hemlocks and appreciate their versatility, but this is about the unexpected shady characters that provide variety and enable those of us with limited space and an obsession for conifers to venture into new, shadier ground.

***Cryptomeria japonica* 'Pygmaea' (pygmy Japanese cedar)**

'Pygmaea' is one of my very favorite Japanese cedars. It is a lush, soft-looking mound of medium green that adds great texture and color to my garden. Except for removing leaves that fall into its dense foliage, this is a totally maintenance-free plant. Here in the Raleigh, NC, area, I've lost quite a few cryptomerias that I've planted in my full-sun front yard. As a result, I've started planting more and more of them in part sun locations.

Abies koreana 'Hortsmann's Silberlocke'.

***Sciadopitys verticillata* 'Picola' (Picola Japanese umbrella pine)**

As you know, Japanese umbrella pines are expensive, and I've bought and killed many of them. I did my best to provide them with everything they needed, including the full sun that conventional wisdom says they require. 'Picola' was sited in a location that received, at most, three hours of direct sun per day, and, unlike its predecessors, was doing beautifully. It had a somewhat swoosh-shape, which typically is not a result of the lack of sun, but illustrates what you may receive when you order an "AB" plant from Iseli.

"AB" plants don't meet Iseli's high standards and are, therefore, discounted, although you may not be even able to tell the difference. Personally, I liked the shape of this tree, and I especially liked that it lived for a while, which I chalk up, at least in part, to its shadier location. Sadly, 'Picola' died. However, despite the failure of my plant, I would recommend it to you. If you're willing to gamble, you might succeed in watching it thrive and grow.*

***Abies koreana* 'Horstmann's Silberlocke' (Horstmann's silver curls Korean fir) (on *Abies firma* rootstock), shown with *Thuja occidentalis* 'Sunkist' (Sunkist eastern arborvitae) and 'Golden Tuffet' (Golden Tuffet eastern arborvitae)**

All three of these plants are capable of handling a whole lot more sun than they get in this shady, backyard location. These trees were all planted in 2013, and, while one could reasonably explain why the arborvitaes are happy, it's harder to explain the healthy 'Horstmann's Silberlocke', which receives even less sun than the other two do because it sits in the shade of the 'Sunkist' arborvitae to its west. I planted the young Silberlocke in 2013. You can see the growth that it's achieved in 2017. These trees get about three hours of full sun, although an hour or so of that is late in the afternoon. They also get several hours of dappled shade per day.

***Chamaecyparis obtusa* (Appeldoorn's unnamed, miniature Hinoki cypress)**

I love this miniature Hinoki cypress. I purchased it from Bruce Appeldoorn in 2013. It has never shown any signs of browning or dieback, and it gets about three and a half hours of sun per day.

Thuja occidentalis 'Golden Tuffet' (bottom left), 'Sunkist' (upper left), and *Abies koreana* 'Horstmann's Silberlocke' (middle right).

***Pinus parviflora* 'Tanima no yuki' (snow of the valley Japanese white pine)**

Finally, don't rule out pines for your somewhat shady spots. This young, variegated Japanese white pine (planted 2014) gets its white flush every year, so far, with only three hours of full sun, per day.

I hope these examples will encourage you to experiment with conifers in some of the shadier spots in your garden. So long as the soil drains well, they may appreciate a break from the brutal, southern sun, just as you and I do.

*Editor's Note. I once planted *S. v.* 'Picola' in clay and full, afternoon sun. I'm in Zone 6a. It burned a bit. I moved it into sandy-loam soil, in a full-shade location, under a large *Pinus sylvestris,* where it was protected from harsh sun, wind, and cold. It became a crisp, bright green and remained so for several years until I thought that it should be in partial sun to promote growth. Then, it was once more in clay soil. It browned progressively for three years and then died. I should have left it in full shade and in well-draining sandy-loam soil. If you have any successful stories of growing *Sciadopitys verticillata* cultivars, please send your story and photographs (1MB or larger) to me, Ron Elardo, at ConQuartEditor@gmail.com. I'd like to hear from you.

Sandy Horn is Southeastern Region Director on the ACS's Board of Directors and is also a member of the CQ Committee. She resides in Cary, NC. Sandy is editor of the *Southeastern Conifer Quarterly,* in which this article appeared in September 2017, pp. 11 – 12.

Pinus parviflora 'Tanima no yuki'.

More Conifers in the Shade

Photography Bruce and Chick Buehrig

Conifers have been doing very well in the shade of the Buehrig Garden in St. Louis, MO. Enjoy the photos of these lovely conifers.

Tusga canadensis 'Sargentii' drooping over the waterfall.

Cupressus nootkatensis 'Green Arrow' on the left among Japanese maples.

Tsuga canadensis 'Bennett' (foreground), *Taxus cuspidata* 'Dwarf Bright Gold' (right), *Taxus* × *media* 'Hicksii' (center rear), *Hosta* 'Victory' (center), and *Picea orientalis* 'Skylands' (far left).

Hemlocks and yews growing in shade along this path.

Tsuga canadensis 'Jeddeloh', a Conifer in the Shade

Plant and Photography Jamie Walcott

This "conifer in the shade" belongs to ACS member Jamie Walcott, Montgomery, AL, USDA Zone 8a. Jamie purchased 'Jeddeloh' at the Birmingham Botanical Garden plant sale four years ago. It lives in afternoon shade, in well-drained, clay-loam soil. According to Jamie, it has withstood the South's summer heat and humidity and has also survived drought. Notice its height. Jamie took this photo on March 30, 2021.

Cedrus libani 'Purdue Hardy'

Text Ron Elardo Photography Tess Park

Cedrus libani 'Purdue Hardy' is located on the main campus of Purdue University in West Lafayette, IN. According to ACS member Tess Park, Carmel, IN, the tree is across the street from the Veterinary College, near the Horticulture School's greenhouses.

If any ACS members have this tree in their garden, Tess and I would like to know how it has fared in your USDA Hardiness Zone. Tess can be reached at conifersocietyTP@aol.com. You can send photos and a short write-up to me, Ron Elardo, at ConQuartEditor@gmail.com. For **CONIFER***QUARTERLY,* photos must be 1MB (300dpi) or larger in resolution. The write-up should include: geographic location, USDA Zone, growing conditions, dimensions, estimated age of the tree, how you acquired the tree, and how it has been doing since planting.

Pictured here is 'Purdue Hardy' growing in the Garden of Tess and Jay Park, Carmel, IN.

This is 'Purdue Hardy' on the campus of Purdue University, West Lafayette, IN. In the lower right is Jay Park.

Here are some facts about 'Purdue Hardy' excerpted from a write-up by Professor Emeritus Harrison L. Flint:

- Purdue Professor Ted Shaw collected *C. libani* seeds while on assignment in Lebanon in the 1950s and planted them on campus.
- When Professor Harrison arrived on campus in 1968, the tree that came to be known as 'Purdue Hardy' was already 10 feet tall.
- Its branches were semi-pendulous.
- It started out as a regularly pyramidal tree, but then developed a flat top.
- It produced male strobili for more than 20 years, with a scattering of female cones.
- During two to three winters in the 1970s, needles were desiccated at the tips.
- After one severe winter in the late 1970s, its needles were mostly killed, but with no evidence of twig or bud damage. Since then, even -25°F temperatures with -80°F wind chills and high winds did not cause 'Purdue Hardy' to suffer any winter damage.
- William Flemer III of Princeton Nurseries, NJ, suggested the name 'Purdue Hardy' and registered this cultivar name with the International Registration Authority for conifers at the Royal Horticulture Society Wisely Garden in Surrey, United Kingdom.

Bayard Cutting Arboretum Jean Iseli Memorial Grant Update

Kevin Wiecks, Landscape Curator, Photography Heather Coste

Upon the request of CQ Editor, Ron Elardo, Kevin Wiecks and Heather Coste provided the photos included in these pages of the Spring CQ.

For the initial report on the Iseli Memorial Grant, please refer to the Fall 2020 issue of **CONIFER***QUARTERLY*, Volume 37, Number 4, pp. 18 – 24.

Picea glauca var. *albertiana* 'Sander's Blue'.

One view of the new conifer garden at Bayard Cutting.

Chamaecyparis pisifera 'Golden Pincushion'.

The "garden ladder" of the new conifer garden at Bayard Cutting.

Pinus contorta var. *latifolia* 'Taylor's Sunburst'.

Picea sitchensis 'Papoose'.

Cryptomeria japonica 'Dinger'.


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