Native Abies pinsapo in southern Spain are conical when young but begin to develop a broad crown with age. (See article on page 16.)

The brightly colored scales (above) of resinous Abies pinsapo cones (right) at the Graver Arboretum. (See article on page 21.)
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- Board Meeting minutes: February 1, 2003
- Annual financial report

Cover photo: *Abies koreana ‘Brevifolia’. Photo by Brita Johansson.*
PRESIDENT’S MESSAGE

All of your national officers, regional presidents, contractors and the Board of Directors were able to attend the Board of Directors meeting in St. Louis on February 1st. The Board Meeting agenda was ambitious and covered a wide range of topics. The dedicated attendees put in a very full day, as this business meeting lasted from 8am to 7pm. Kathleen Pottratz rose to the challenge of both the meeting’s pace and duration in her first experience as the Conifer Society’s secretary. Thanks Kathleen! I want to personally thank all the attendees for the consideration they showed me as I chaired my first Board Meeting.

A summary of the meeting minutes is included as an insert with this issue. In addition to the regular items of business, significant time was spent on legal, insurance and financial matters. Don Wild may be learning more about insurance than he ever wanted to, but when the dust finally settles, I believe he will have helped us define the right coverage to protect the society, directors, officers and contractors.

The Board discussed the work products of the independent contractors, and following this discussion, John Martin, Anne Brennan and Charlene Harris were all thanked and complimented. Let me personally thank these three for your assistance and patience as I continue to learn the job.

In a surprise presentation (at least to her), Charlene Harris was given the Central Region’s 2002 President’s Award for Volunteerism. Congratulations! As members, you can be proud of all the dedicated and talented individuals who
are working hard on your behalf.

This issue contains an article (page 23) that discusses necessary changes to our plant auctions. I sincerely hope once you understand the challenge and the opportunity, you will enthusiastically join in this fresh approach to plant auctions – an approach that your Officers and Board believe is timely, necessary and prudent. I hope that, by publicizing these changes and raising awareness, we will begin to embrace the new changes as soon as is reasonable.

Knowledgeable and responsible people have tried to develop processes and procedures to protect the very plants we all love. It is in our own individual best interests as well as that of the Conifer Society to understand and be supportive of their efforts. In fact, as a plant society we should be an exemplary role model of plant stewardship responsibility.

Remember, without your active support and cooperation, these necessary changes cannot be accomplished. Since the auctions are such important fundraisers, it is the job of every Conifer Society member to support this effort to keep the Society financially healthy, and to make fun-filled plant auctions possible for years to come. Thanks in advance for your understanding and support.

What will YOU do in the next 90 days to make the Conifer Society better?
Welcome, Spring!

After near-record snowfall and abnormally chilly temperatures here in the Northeast, some of us were a little disoriented when the grass finally reappeared (not to mention the driveway). Now I remember why our USDA Hardiness zone 6b is said to have an average annual minimum temperature of 0° to -5°F; this is something we haven’t seen for several years.

However, my three Cedrus deodara and small Cathaya argyrophylla look great without any significant needle drop. All of these belong in zone 7, but they were too adorable to pass up at the Conifer Society’s plant auctions! Since I’ve learned that winter damage may not appear until active Spring growth begins, I’ll keep my fingers crossed until June.

This issue of the Conifer Quarterly brings you a group of articles about firs, the featured plant group. We learn about desirable cultivars from Holland, recommended species based on observations from the Morris Arboretum, and Abies pinsapo (Spanish fir) both in its native setting and in cultivation. Check the back covers for additional Abies photos submitted by readers.

Further, Orlan Gaeddert answers in print the many requests for details about his plant labeling system. Next, we check in with the 2002 Iseli Grant recipient to learn how the funds were used to create a conifer garden for the campus and surrounding community. Another article examines nine prostrate pine cultivars, and national president Dennis Groh explains important changes regarding Conifer Society plant auctions.

Finally, this issue spotlights events organized by our four Regions.

The Summer issue will focus on the genus Tsuga, the hemlocks. We will assess the continuing threat from hemlock wooly adelgid while also celebrating the beauty and grace of this plant group. I look forward to including your hemlock photos and other submissions.

See you in Denver!
Fir Species for Temperate Gardens
by Anthony S. Aiello

Many firs can adapt to warm summers

When visitors come to the Morris Arboretum they are impressed by the diversity of our collections, including the young and vigorous plants growing among our statuesque mature specimens, all set within a historic landscape. One of our largest and most beautiful collections is the wide array of conifers growing throughout our garden, including over 70 taxa of *Pinus*, 50 taxa of *Picea*, 40 taxa of *Chamaecyparis*, 29 taxa of *Abies* (see Table 1 on page 9) and numerous others.

Last year the American Association of Botanic Gardens and Arboreta (AABGA) recognized the Morris Arboretum as holding a national collection of *Abies*, as part of their North American Plant Collections Consortium (NAPPC) program. Begun in the late 1980’s, the NAPCC is a growing network of botanical gardens and arboreta dedicated to increasing the awareness of the value of plant collections for germplasm preservation and to coordinating conservation efforts. Through a formal application and field review process, institutions seek to gain recognition for their significant collections and promote their value nationally.

Our collection represents the breadth of distribution of firs, with plants from North America, Europe, Asia Minor, and Asia.

Our collection focuses on species and not cultivated varieties of *Abies*. Several of our historic fir specimens are among the largest of their kind in eastern North America, and are clearly well adapted to the growing conditions of the mid-Atlantic region. In addition, many wild-collected plants have been added over the past 20 years through Arboretum staff participation in plant collecting expeditions to Korea and China. These expeditions, along with seed and plant exchanges, have resulted in 23 wild-collected taxa of *Abies* in our collection, and we anticipate continued participation in these trips and exchanges. Many of the trees are planted in the Arboretum, but many are still too small to be planted out and remain in our greenhouses. Our collection represents the breadth of distribution of firs, with plants from North America, Europe, Asia Minor, and Asia. Our goal is to display a diversity of fir species and evaluate them for their adaptability to our region. This collection will serve as a teaching, display, and research resource for the public and professional visitors, and will demonstrate the range of species available for gardens in the area.

The conditions at the Morris Arboretum include acidic and well-drained soils, a variety of topography and associated microclimates, hot and humid summers, and moderately cold winters.
We are located at the southern edge of USDA zone 6B, with an average annual minimum temperature of \(-5^\circ\text{F} (-21^\circ\text{C})\). Rainfall averages approximately 45 inches (114 cm) yearly, and there is regular snow cover.

Our climate allows us to grow plants adapted to warmer climates as well as some of the most cold-hardy members of the genus. Cold hardiness is generally not the limiting factor for many of the fir species from the north temperate regions; rather they are limited by our summer temperatures, and especially our hot summer evenings, which are especially stressful for this genus.

The Morris Arboretum began as the private estate of brother and sister John and Lydia Morris. John died in 1915, and when Lydia passed away in 1932, their property became part of the University of Pennsylvania as the Morris Arboretum. Many of the largest mature specimens, such as *Abies cephalonica*, *A. holophylla* and *A. homolepis*, date from the Morrises’ time and were certainly planted before 1920. The origin of these plants is unclear, although we do know that John Morris purchased plants from Veitch Nurseries in England as well as Andorra Nurseries in Philadelphia, and he received plants from the Arnold Arboretum’s early plant expeditions.

Regardless of their origins, these mature specimens are a marvel, and no matter how often I stop to admire them, they never fail to awe me with their size and beauty. One of my favorite old trees is a towering specimen of *A. cephalonica*, a species native to Greece but well-suited to our conditions. The beautiful tree has a 38.7-inch (98.2-cm) DBH and is over 100 feet (30m) tall. Its dark green needles show no signs of stress despite the severe droughts and high temperatures of the past several summers. The ultimate size of Greek fir makes it most suitable for large spaces.

Our collection of stately mature specimens includes the needle fir (*A. holophylla*), named for its sharply-pointed needle tips. Needle firs are native to China, Korea, and southeast Siberia, and one of our specimens from 1937 has a DBH of 39.6 inches (100.7
cm) (see photo on page 6). In addition, we have several young vigorous plants collected on a 1981 expedition to South Korea and a 1986 expedition to Jilin province in northeast China. As these are extremely tolerant of drought and heat, this species shows great promise as a landscape fir for Philadelphia and areas south of us.

There are fir species that do lend themselves to smaller gardens. Among these is my favorite fir, the Spanish fir (A. pinsapo), a relatively slow-growing species.

Another fir that is very tolerant of our summers is A. nordmanniana, the Nordmann fir, one of the best species for our region and one of the most handsome firs with its deep black-green needles. Our collection consists of old specimens, a 40-year-old A. nordmanniana ssp. equi-trojani collected in Turkey, and some very young plants still growing in our hoophouses, also collected in Turkey. This is an excellent example of how we are managing older plants in our collection while seeking out new sources of germplasm to add throughout the Arboretum. We are targeting Nordmann and other firs from Asia Minor to be added because these are probably the best-suited for growing in our climate.

The balsam fir (A. balsamea), our lone native Pennsylvanian fir, is a common Christmas tree but is not well adapted to our summers. A. balsamea var. phanerolepis is a variety of balsam fir from northern Virginia and West Virginia that is considered to be more tolerant of heat and heavy soils than the species. We have several 10-year-old plants growing in a stressful site, and I am eager to observe their long-term performance.

Although native to the mountains of the western United States, A. concolor, the white or Colorado fir, with its long, graceful blue-green needles, is probably the best North American species for us.

Most of these full-sized firs would be too large for the average home garden, especially when competing for space with the other plants in the garden, whether they are dwarf conifers or not. There are fir species that do lend themselves to smaller gardens. Among these is my favorite fir, the Spanish fir (A. pinsapo) a relatively slow-growing species native to both sides of the Strait of Gibraltar.

Spanish firs have beautiful, short blue-green needles that spread radially from the branches at nearly right angles, accentuated by upright purple cones in spring. Although Spanish fir reaches 70 feet (20m) or more at maturity, our two plants are about 45 feet (14m) tall but less than 20 feet (6m) wide after 40 years. Being native to a region of hot summers, A. pinsapo is very well suited to growing in our area. My wife and I planted one in our modest-sized urban garden last summer, proving that I really have faith in its slow growth rate!

The Siberian fir, A. sibirica, is a species that I know only from one plant we have in our collection (see photo on page 8), which appears to be a very slow-growing species. After 20 years, our plant is just over six feet tall (2m) and I
wonder if it is a case of the individual or the species being this slow growing. It could be a very useful plant for smaller gardens. Its needles are extremely soft and fine-textured, giving it the most graceful appearance of any fir I know.

I like to think that our commitment to our fir collection carries on the work that the Morrises began over one hundred years ago. We are fortunate to have a diversity of sites within the Arboretum that allow us to pursue the goals of sustaining and building this collection. We plan to maintain the health of our statey old and middle-aged specimens, insure the future of our younger specimens, and continue to grow and evaluate species not commonly found grown in our region.

In closing, as I sit and write this article on a snowy winter day, I can think of nothing better than visiting the Arboretum and wandering out in the snow to enjoy the beauty of our firs. This is just a sampling of the diversity of our collection, but I invite all readers and conifer lovers to come and visit us. I would be happy to share our collections with you.

Literature:

About the author: Anthony S. Aiello has served as Director of Horticulture and Curator of the Living Collection at the Morris Arboretum of the University of Pennsylvania since July of 1999. His interests include trees and shrubs from the northern temperate regions, and in particular conifers, magnolias, maples, hollies, and witchhazels.
Table 1. List of Abies taxa at the Morris Arboretum. Names are based on Farjon, 1990 and 1999.

<table>
<thead>
<tr>
<th>Abies alba</th>
<th>Abies lasiocarpa</th>
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<tbody>
<tr>
<td>Abies amabilis</td>
<td>Abies magnifica var. shastensis</td>
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<tr>
<td>Abies balsamea var. phanerolepis</td>
<td>Abies nephrolepis</td>
</tr>
<tr>
<td>Abies borisii-regis</td>
<td>Abies nordmanniana</td>
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<tr>
<td>Abies cephalonica</td>
<td>Abies nordmanniana ssp. equi-trojani</td>
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<tr>
<td>Abies cilicica</td>
<td>Abies pindrow</td>
</tr>
<tr>
<td>Abies concolor</td>
<td>Abies pinsapo</td>
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<tr>
<td>Abies fabri</td>
<td>Abies procera</td>
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<td>Abies fargesii</td>
<td>Abies recurvata</td>
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<td>Abies recurvata var. ernestii</td>
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<td>Abies forrestii var. georgei</td>
<td>Abies sachalinensis</td>
</tr>
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<td>Abies sachalinensis var. gracilis</td>
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<tr>
<td>Abies holophylla</td>
<td>Abies sibirica</td>
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<tr>
<td>Abies homolepis</td>
<td>Abies veitchii</td>
</tr>
<tr>
<td>Abies koreana</td>
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</tbody>
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Dutch Abies Cultivars for Every Garden
by Ronald Vermeulen

A collector describes a dozen top plants

In this article I describe some of the most desirable Abies cultivars that are found and raised in Holland. Most Abies grow well in the moderate, wet Dutch climate, and there are many cultivars with high decorative value, including the early coning cultivars of Abies koreana and Abies procera.

Some cultivars are planted to create color change in the garden, such as Abies koreana ‘Golden Dream,’ A. k. ‘Bonsai Blue’ and A. k. ‘Silberlocke.’ Others are used for their compact growth habit, including many Abies koreana cultivars arising from witches’ brooms and chance seedlings.

Most Abies cultivars are propagated on rootstocks of Abies koreana and Abies alba because those have produced strong plants in the nursery and garden.

Abies nordmanniana ‘Golden Spreader’
A bright golden dwarf fir (see photo on back cover) whose leaves are 0.5-1 in. (12-25 mm) long and 1.8-2 mm wide, pale yellowish beneath and golden yellow above. The winter color is brightest, but spring and summer color is also superb. With an annual growth rate of 1.5-2 in. (4-5 cm), ‘Golden Spreader’ is a flat-topped and spreading plant in the early years, though it can produce a leader with age and may become a conical small tree with a rounded top if the leader is not pruned away.

In hot and dry summer climates, plant this cultivar in partial shade to prevent leaf scorch. In cooler, maritime climates it will grow best in full sun for the brightest color.

This plant is even suitable for the smallest garden, and once established it looks very healthy. It originated as a chance seedling in the nursery of S.N. Schoots in Culemborg and was introduced into the trade by L. Konijn and Son Nursery in Reeuwijk near Boskoop in 1961.

Abies concolor ‘Piggelmee’
An attractive and very slow growing miniature form, ‘Piggelmee’ originated as a witches’ broom on an Abies concolor ‘Candicans’ in a garden in Geneva, Switzerland. Mr. H. J. Drayer found the broom, and his nursery in Heemstede propagated the plant and introduced it to the trade in 1971.

This witches’ broom retains the silver blue coloring of ‘Candicans’ but its 0.6-in. (1.5 cm) leaves are much shorter, curved and pale powder blue. The annual growth is only 0.8-1.2 in. (2-3 cm), and the shoots stick straight out from the stubby branches. This desirable dwarf and rare cultivar tends to spread.

Abies koreana ‘Cis’
This plant was described previously in American Conifer Society Bulletin Vol. 10, No. 3 (Summer 1993). It was found by nurseryman Mr. Roelvink in Zuidbroek (near Groningen). In 1970, he
Abies koreana, and in 1975 he noticed one very compact plant. He immediately took it to his private garden, where it grew 0.8-1.2 in. (2-3 cm) annually to become a dense, flattened globe.

In 1992 this original plant was 60 cm in diameter and only 40 cm high; a very compact plant, more or less globular and with a strong branching habit. The needles are 0.3-0.5 in. (0.8-1.2 cm) long with a fresh green color and the buds are a distinct brown. It’s a nice slow growing dwarf form, most suitable for the rock or heather garden.

‘Cis’ is a shortened name of Cisca, the name of Mr. Roelvink’s mother and derived from St. Francisca.

Propagate this plant from cuttings; while grafted plants may grow stronger compared to cuttings and will eventually develop into a tight ball, they don’t have the attractive, dense habit when young. Introduced in 1992, the first plants went to collectors but officially entered the trade in 1999 during the ‘Plantarium’ exhibition in Boskoop from Mr. W. Linssen and Libo Nursery in Baexem.

Abies koreana ‘Gait’
This is a globular but leader-forming, slow-growing dwarf with the shape of a miniature Abies koreana. It produces attractive small cones at an early age. The new foliage is a fresh green, and the needles are very short. It fits in every garden and attracts attention as a result of the cones.

Mr. Roelvink in Zuidbroek (near Groningen) found the original seedling in approximately 1975. ‘Gait’ was initially distributed to some collectors in 1999, but it will be introduced to the trade very shortly by Libo Nursery and Mr. W. Linssen in Baexem.
**Abies balsamea ‘Renswoude’**

This plant originated as a witches’ broom on an *Abies balsamea* ‘Nana’ found by Mr. G.V. Brenk from Barneveld in 1995. He discovered the broom while maintaining a garden in a place called Renswoude, hence the name. He dug out the whole plant and he brought it to nurseryman P. Vergeldt in Lottum, who planted it in his garden where it remains today. Of course, he started to propagate the broom, and the first plants were sold in 1997 to some collectors to try. Now those plants look very healthy and are developing nicely.

After three years it forms a dwarf rounded ball with a diameter of 10-15 cm, and the annual growth is around 3-4 cm. The needles are of a lighter green than the species.

The name is not yet registered, but the intention is to show it very soon to an examination committee of the Royal Boskoop Horticultural Society (Holland), which determines new cultivars to be registered.

**Abies nordmanniana ‘Pévé Hasselt’**

In the summer of 1997, Mr. and Mrs. Vergeldt from Lottum, Holland, walked through a park in Hasselt, Belgium, and saw a wide, flat witches’ broom in a mature *Abies nordmanniana*. They couldn’t reach it, and it wasn’t the right time for grafting, but they knew a conifer collector in Hasselt named Mr. V. Schoefs, who had connections with the gardener in the park. So in autumn of that same year, Mr. Schoefs brought the whole broom to Mr. P. Vergeldt in Lottum for propagation.

Now after 4 years, the plants are about 12 in. (30 cm) wide and 8 in. (20 cm) high, forming a flat-topped dwarf. The tops of the shoots turn a little downwards, so an open branch structure will develop. The needles are of a lighter green than the species. The plant is not officially registered yet, but it will almost certainly be judged by the examination committee next autumn for registration.

Pévé is a shortening of the name Piet Vergeldt, whose introduced plants all begin with the word Pévé.
**Abies koreana** ‘Green Carpet’

Found as a chance seedling at De Driesprong Nursery in Wekerom about 1980, ‘Green Carpet’ was introduced by L. Konijn nursery in Ede-Eerveen (near Veenendaal) about 1985. It has a spreading, cushion-shaped form growing to about 5 ft. (160 cm) wide and 1.5 ft. (50 cm) high in 10 years. It is not a ground cover as the name suggests. The annual growth rate is 4-6 in. (10-15 cm) with fresh, shiny green leaves.

**Abies grandis** ‘Van Dedem’s Dwarf’

Seven similar, very dwarf plants were found at Den Aalshorst in Dalfsen before 1975 as chance seedlings in a Christmas tree plantation of *Abies grandis*. Mr. T. de Lange from Nuenen distributed four plants to other conifer collectors and friends, and scions from those plants were propagated. There are different plants in circulation with the same name, but they are identical in appearance. This cultivar was introduced to the trade about 1990 by Den Aalshorst in Dalfsen.

The plant is somewhat spreading but mostly spherical in shape with an open branch structure, a real collectors item. It’s a very dwarf plant with 1 cm dark green leaves, and after 20 years it’s only about 16 in. (40 cm) high and 28-32 in. (70-80 cm wide). So the annual growth rate is about 0.8-1.2 in. (2-3 cm), though occasionally a few shoots can grow up to 2-4 in. (5-10 cm) in one year.

**Abies koreana** ‘Oberon’ (syn. *Abies koreana* ‘Stolwijk Nr. 2’)

‘Oberon’ was found in 1963 by D. Guldemond and Son nursery in Boskoop and introduced into the trade by the same nursery in 1978. It’s a very slow-growing dwarf form with beautiful short dark green needles and striking white buds in autumn and winter.

In 20 years it will be about 48 in. (120 cm) high and 24-28 in. (60-70 cm) wide if staked. Usually it does not form a leader, but with a little help it will manage to grow upright. Naturally it becomes a small rounded dwarf with many shoots that try to stand up, and with the white winter buds it has an beautiful appearance. It is one of my favorites. The name ‘Oberon’ means king of the dwarfs or elves.

**Abies koreana** ‘Piccolo’

Slow growing and seldom forming a leader, ‘Piccolo’ has pendulous branches and branchlets that grow approximately 2-2.5 in. (5-6 cm) per year. The needles are short and very dark green. Sometimes
young shoots will lose their needles, producing an unattractive appearance.

This cultivar originated at L. Konijn nursery in Ederveen (near Veenendaal) and was introduced to the trade in 1979.

**Abies koreana** ‘Kristallkugel’

Nurseryman Mr. W. Linssen from Baexem, Holland, encountered this plant in 1988 in the garden of Mr. K. Wittboldt-Müller in Verden-Eitze, Germany. Mr. Wittboldt-Müller told him the plant came from the U.S. but with no name. He gave it to Mr. Linssen, who planted it in his own conifer collection and labeled it “*Abies koreana* W.M. 006318 Am.” When Mr. Wittboldt-Müller visited Mr. Linssen’s collection several years later, he said the plant looked like a crystal globe (*kristallkugel* in German), so a new conifer name was born.

It developed into an extraordinary plant with excellent qualities including nice white winter buds and fresh green needles. It grows a little faster than *Abies koreana* ‘Silberperl’ as a round, flat-topped dwarf that is especially attractive grafted on a standard. The plant is becoming very popular and has a promising future. It was introduced into the trade in 1999 during the Plantarium exhibition in Boskoop by Mr. W. Linssen in Baexem, though it did not win any awards.

**Abies koreana** ‘Wellenseind’

This new plant originated as a witches’ broom, found in 2001 by Mr. D. van Hoey-Smith on the Wellenseind property of Mr. Zeeman in Lage Mierde in the south of Holland. The broom was about eye level and close to the trunk of a 20-ft. (6 m) tall *Abies koreana*. It’s a little compact ball of 8-10 in. (20-25 cm) in diameter with remarkable fresh, dark green needles. Mr. van Hoey-Smith took some scions of the original broom, which is still on the tree, and brought those scions to nurseryman Mr. N. Kools in Deurne. He successfully propagated some plants in January 2002, so we will watch its progress over the next several years. It looks promising as a novelty.

**Abies koreana** ‘Luminetta’

(syn. *Abies koreana* ‘Lutea’)

A bushy plant with pale cream leaves, this cultivar grows upright in the typical *A. koreana* form. It was found as a chance seedling and introduced by L. Konijn Nursery in 1977. Originally known as *Abies koreana* ‘Lutea,’ the name was changed to *Abies koreana* ‘Luminetta’ in 1990.

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**About the author:** Ronald Vermeulen and his wife Monique live in Deil, a small village in the middle of Holland. He is a fruit consultant by profession and a hobbyist conifer collector. He collects small forms of *Abies, Cedrus, Pinus* and *Picea* and does some grafting. Currently he is chairman of the Dutch Conifer Society (N.C.V.).
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The above 3 pictures were taken at the National Arboretum in Washington D.C. in August of 2001. When planted in the fall of 1998, they were 3 feet tall and planted on 6 1/2 foot centers. They grew 3 feet in the first year (1999), and are now 10-12 feet tall. It can be trimmed to any height or width to create the ultimate natural or formal hedge.

"The Thuja Green Giants are the toughest, disease, insect, deer and ice resistant evergreen I have ever used. I am 6' tall with a 6' arm span, so you can see the height to width ratio of these trees." - Mike Shade

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Lost and Found
by Don Howse

With perseverance, group locates native Abies pinsapo stands in southern Spain

The Spanish firs (Abies pinsapo), as we know them in cultivated situations, are narrow spire-like trees. The most common selection grown is the blue form, known as ‘Glaucan.’ This grayish-blue tree is often chosen in temperate landscape situations as a focal point with its distinctive form and subtle color. The erect, violet-purple cones provide additional ornamentation. A golden form (‘Aurea’) exists, as well as a dwarf form (‘Horstmann,’ see photo on back cover) and other variants. However, the native trees in southern Spain exhibit a somewhat different form.

Change of plans
When my fellow travelers and I were evacuated from Pakistan in September 2001, we decided to continue our adventure in a less dangerous setting. [Editor’s Note: See Vol. 19, Nos. 3 and 4 for descriptions of the Pakistan expedition.] We purchased tickets from London to Malaga, Spain. There we rented a seven-passenger van, and without an itinerary, we set out to investigate the mountains of Andalusia in southern Spain. We visited the alpine slopes of the Sierra Nevada, above Granada, climbing to 9,500 feet (2900 m). We also toured the forested slopes of Sierra Cazorla, Sierra Magina, and Sierra Bermeja. In the small communities of each of these mountain ranges we would see Spanish firs used as landscape trees. We even saw planted forests of young trees on the slopes of the Sierra Nevada. In the Sierra Cazorla, we saw magnificent specimens of Cupressus sempervirens, Juniperus oxycedrus, and Pinus nigra, some with witches’ brooms.

I had heard that there were only remnant forests of the Spanish firs, and that they were located somewhere in this southern province. With the help of a Spanish botanical book that we purchased at the National Park bookstore on the way up to the alpine slopes of the Sierra Nevada, we were able to pinpoint the last three remaining groves of native trees. We were fortunate that our compatriot, Panayoti Kelaidis, is fluent in Spanish and could decipher the botanical jargon as well as the maps.

Climate and culture
The three groves are in the Sierra Bermeja, near the city of Rhonda. The southern faces of these mountains rise dramatically above the Mediterranean Sea to about 5,000 feet (1500 m). Moisture-laden air rises up these slopes from the sea and drops its rain or snow on the mountain peaks. North of the mountains is a broad plain that is very dry and planted with grapes, olives and other
temperate crops. The historic and romantic cities of Seville, Cordoba, Baeza and Grenada, with their Moorish influence, are located in this arid plain. Now that I think of it...no, the rain in Spain does not fall mainly on the plain as the well-known show tune claims!

The small cities and villages of Andalusia are very picturesque, and each community has a magnificent cathedral or church near the city center, with a plaza and very narrow cobbled streets. Many of the communities have box-like ancient castles, each situated on a craggy promontory above the town. The old architecture alone is a reason to visit this beautiful and historic area. The romance expressed by the great Spanish writers and artists could be felt while exploring the towns and villages during our evenings. I almost expected to see Don Quixote tilting at windmills.

On the map we noticed that the city of Grazalema seemed to be situated closest to the remnant forests. As we approached Grazalema, nestled against a steep craggy mountain, we passed through groves of cork oak trees (*Quercus suber*) with their debarked trunks. The road is very winding and we could get glimpses of the whitewashed buildings through the trees. Its beauty seemed dream-like.

As it turned out, Grazalema is a tourist mecca that draws European vacationers to its mountain retreat. Among its trendy restaurants, hotels, and shops was a place to buy tickets for hiking the trails to see “the Pinsapos.” Since we had arrived late in the afternoon, and the office would not open again until the next morning, we decided to get rooms and enjoy the ambiance of the community. The gift shops offered souvenirs emblazoned with schematic trees, and the name “Pinsapo” was used often on building fronts – even the pub was called “The Pinsapo.” A few representatives of the species had been planted around town. Since Grazalema was not far from Seville, where the famous Spanish Sherry wine is brewed and bottled, we decided to purchase a bottle of the local selection and spent a sunny afternoon in peaceful reverie.

**Reaching the grove**

Rising early the next morning, we were first in line at the office window, where we hoped to procure our entrance tickets to the guarded trails in the nearby mountains. Evidently the number of hikers is limited each day so that the environment is not overtaxed, and the agency that maintains the forest is funded by the visitors. We met several European hikers, and even visitors from as far away as Australia. Our Australian traveling companions, Robert and Rochelle Watch, were delighted to meet fellow countrymen here in this remote Spanish community.

We had to wait until after 10 AM before the attendant opened the office, and then she could not issue the permits, as she was having some problem contacting officials at some other location. Since we had already checked out of our hotel, and planned to travel later that day

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Among the trendy restaurants, hotels, and shops was a place to buy tickets for hiking the trails to see “the Pinsapos.”
to the seaside city of Estepona on the Costa del Sol. we gave up our place in line. We decided that we would drive up the winding mountain highway to the forest and see if we could park and enter on foot.

We did notice a few young “pinsapos” in the chaparral on the mountain slopes, but we decided that they must have been recently planted. Near the top of a north-facing slope, far above the highway, we could see the forest rising near the summit of the mountain. At the trailhead a uniformed guard waited for the day’s allotment of hikers. We guessed that the forest was miles away, on a steep trail, from our position. So all we could do was gaze at the distant forest and wish we had the entrance vouchers.

We descended the serpentine mountainous road to the seacoast and found ourselves in the beachside tourist resort of Estepona, with the waves of the blue Mediterranean Sea washing the clean sand. Our hotel was across the boulevard from the beach, and we spent the next several days there enjoying the good food, wine, and ambiance of the warm Mediterranean beach. We also had time to clean and pack the seed we had collected in the mountains of southern Spain.

Behind Estepona, a dark volcanic peak rose dramatically. At the top we could see a forest and a microwave radio station. Looking at our maps, we realized that one of the other groves of Spanish firs was located on this peak, and that there was a winding road leading up to the 4,500-ft. (1370 m) summit. The name of the peak was Sierra Reales, or Mountain of the Royals, and it was part of the greater range known as the Sierra Bermeja. Most of the mountains

An enormously broad and spreading *Abies pinsapo* growing in its native habitat.
of southern Spain were composed of limestone and were much lighter in color. This peak, being volcanic, had a darker color and sat apart from the peaks in the range.

On a beautiful early October morning, we set out to investigate the possibility that we may yet see the trees in their natural habitat. We left behind the sub-tropical comfort of the seaside community and drove carefully up the winding narrow road. Near the top of the peak, we passed a parking area and trailhead that led onto the cool north slope of the mountain, and a sign that read “Paseo Pinsapos.” We continued on and found another parking area, with a rest area, tables and a concessionaire. From there we had a view of the coastal plain and the blue Mediterranean Sea. The Costa del Sol, the Coast of the Sun, spread its white sandy beaches into the distant eastern horizon. We were near the summit, but still perhaps 500 vertical feet below it. At the parking area the continuation of the road was gated, so we took our cameras and lunch sacks and headed up the trail.

At the trailhead there was a bust and plaque honoring a famous European botanist, Edmund Boissier (1810-1835). Evidently this young man had botanized these slopes long before our arrival. I wondered why his life had been so short. I have grown a hen-’n-chicks species in my collection which bears his name, Sempervivum boissieri. From the parking area, a rocky road wound upward through the pine (Pinus nigra) forest. Along the road we found a young tree with yellow variegated foliage, about three feet in height. We also found a few trees with witches’ brooms as we climbed toward the summit. A couple of ibex, or European mountain goats, appeared briefly on a rocky ledge above us and then disappeared into the forest. They were far too quick for me to focus the camera.

They were not tall and narrow, like the trees in our gardens, and they were very dark green in color.

Abies at last
As we approached the top of the mountain, the forest changed from pine to fir, and we found ourselves among magnificently gnarled, broad spreading fir trees. We had located the “pinsapos”! They were not tall and narrow, like the trees in our gardens, and they were very dark green in color. Young trees were upright and conical, but the older ones had been beaten and twisted by the harsh winter weather conditions. They had broad crowns that developed on multiple trunks. At this altitude, heavy wet snows would come with the cold fronts off the sea. The trees were very picturesque and beautiful to see.

The top of the peak was very rocky, with many outcroppings. The seedling trees would sink their roots into the duff and eventually find a crevasse or crack in the rock. We jumped from rock to rock trying to get the best angle to take photos of these magnificent specimens. From this alpine crest we could view the coastline to the west, and we looked down to the Rock of Gibraltar, the Gates of Hercules, and Africa in the distance.

We thought it peculiar that there were no cones to be seen. I had looked
forward to collecting seed of the species trees, but without cones there is not seed. I wondered if they had all been collected by someone for re-forestation purposes or for economic reasons. Whatever the reason, there were none available for us to gather. Despite that disappointment, our search for the trees had been rewarded with magnificent vistas and views of the wonderfully grotesque firs. Some of the trees were quite stunted from the accumulation of winter snow and probably the harsh winter winds. We did find some plants at the very apex of the peak that were almost prostrate in habit, with their stiff green needles held upright on broad spreading branches.

We were alone when we first arrived, but soon the warming sunshine brought other day-hikers up to the mountaintop. We decided to descend the mountain cross-country, not following the road. An early fall bulb, Scilla autumnalis, was blooming with tiny lilac pink flowers in the forest duff. We had seen autumn crocus (Crocus sativus) and Colchicum sp. blooming at other sites earlier during our Spanish adventure. There were several species of rock rose growing under the forest canopy, including Cistus albidus and Cistus crispus. Strawberry madrone (Arbutus unedo) was represented as large massive shrubs with an abundance of bright red fruit. The heather (Erica sp.) was beginning to offer lavender flowers for its winter bloom. We also found the French lavender (Lavandula stoechas), growing in sunny sites.

Descending the mountain, we decided to stop at the trailhead where the sign pointed to “Paseo Pinsapos” and walk a short distance along the trail. The trail was in the shadow of the mountain, on its north side, and considerably lower in elevation than where we had previously seen the Spanish firs. It was also much cooler, being in the shade. We entered a narrow chasm, and tall stately trees standing to perhaps 80 feet (25 m) were scattered along the trail and on the steep slopes. These again were Abies pinsapo, but these trees were more similar in form to the garden specimens I had seen, except they were very dark in color, not like the bluish forms often grown horticulturally.

We were awed by the beauty of these grand trees. The Spanish forestry commission is attempting to replenish the forests with these trees, which were close to extinction after the many years of cutting and herding of sheep. We felt very fortunate to see the trees in their natural setting and see how they varied according to their situation. I have always appreciated the various forms of Abies pinsapo in my collection, and more so now that I have seen them in person.

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About the author: Don Howse, long-time active member of ACS and frequent contributor to the Conifer Quarterly, is owner of Porterhowse Farms in Sandy, Oregon. He is a charter member of the Conifer Society and has served on the board as an officer. He is currently national meeting chair for the 2003 National Meeting in Denver.
When my husband Ken was named Grounds Manager of Graver Arboretum in November 1994, Dr. Lee Graver had about 45 conifer seedlings sitting in black plastic pots near the work shed. At that time of year, Ken was swamped with the general fall clean-up of the 48-acre property.

Springtime rolled around, and Dr. Graver stopped by frequently, checking on the work underway. He had left a timetable of written instructions for Ken, which included “Spring is a good time for planting trees raised in pots until a suitable size for setting out in the fields.” Ken, however, was occupied with training new field help, cutting and disposing of winter-damaged shrubs and mowing more than 20 acres of grass in the conifer arboretum. The conifers in the black plastic pots sat unplanted (and unwatered) until late summer, when Dr. Graver, out of patience, set a date with Ken to supervise the tree planting.

At that time, there was no documentation of the existing conifer collection – more than 500 plants ranging from 10 to 45 years of age. Ken and I both felt it was more important to identify and care for what was already in the ground and growing, without distractions like digging holes, preparing soil mix, planting and watering 45 seedlings. We were only just beginning to learn to

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*Abies pinsapo* (Spanish fir), whose blunt needles are not as prickly as they look.
distinguish a pine from a fir from a spruce, so we couldn’t yet appreciate the more unusual species in the collection. So, although the 45 seedlings were planted properly under Dr. Graver’s watchful eye, they were not well cared for that first year, and about 10 of them died before the next growing season.

**Information gathering**

Included in those that did survive, however, were three small trees Dr. Graver called “Spanish fir.” In our ignorance, we didn’t accept this identification. We had learned, after all, that fir needles are flat and soft, so these little trees with bristles of short firm needles couldn’t possibly be firs! The only reference we had at that time was Dr. Graver’s bible, the 1960 printing of L. H. Bailey’s *The Cultivated Conifers in North America* (Macmillan), which doesn’t list “Spanish fir” in its index. It does, of course, list “Abies pinsapo,” so once we got to that point in our learning, we found it described as an “attractive tree for mild climates or protected places … leaves spreading radially at nearly right angles, linear, thick and rigid, acute or obtusish, 3/5-3/4 inch long…”

It was at least another year before we began to build our reference library, and *The Manual of Cultivated Conifers* by Gerd Krussmann has been invaluable (Translation by Hans-Dieter Warda, Timber Press, Inc., 1995.) This comment about *Abies pinsapo* (p. 43) grabbed our attention: “Cannot be confused with any other species because of its stiff, radially arranged needles.” Krussmann also says that the “base [of the needles is] expanded shield-like, not twisted, apex seldom prickly.” How, then, to explain that the needles on two of our three trees are pointed, and sharp to the touch?

We found the answer to this question in *Conifers: The Illustrated Encyclopedia* (D. M. van Gelderen, J. R. P. van Hoey-Smith, Timber Press, Inc., 1999). The photo on page 58 carries this caption: “*Abies marocana*, Moroccan Fir. A very close relative of *A. pinsapo* and often considered to be a variety of it.” (Please note that the *World Checklist of Conifers*, the Conifer Society’s primary verification source, prefers *Abies pinsapo* var. *marocana*.) The little yellow plastic nursery tags were no longer in place by the time Ken and I were involved in mapping and documenting the conifers in the Graver Arboretum, so it is likely, but not certain, that our two pointy-needled Spanish firs are in fact Moroccan firs. In the ground from gallon pots for seven years now, both these trees are about 5.5 ft. (1.7 m) tall, while the *A. pinsapo*, planted at the same time, is about 12 ft. (3.6 m) in height. The photos on page 21 show the needles of *A. pinsapo* at the bottom, and what we believe to be *A. pinsapo* var. *marocana* at the top.

The two Moroccan firs have not yet produced cones, but the Spanish fir produced a number of cones for the first time in 2001, and three in 2002. A photo on the inside front cover of this issue shows the resin on a 4.5-in. (11-cm) Pinsapo cone, which disintegrated only...
two days later. The photo next to it shows the bright color of the inside scales of a newly opened cone.

**Cultivating Spanish fir**

Keith Rushforth, in his book *Conifers*, published by Bath Press in England in 1987, says (p. 74) that, “Spanish fir is restricted to three sites around Ronda in southern Spain … the best silver fir for sites on chalk. Despite its southerly origins, Spanish fir is fully hardy throughout the British Isles, although slow-growing.” Bailey (p. 89) concurs: “Hardy in sheltered positions as far north as Massachusetts. A handsome tree of striking appearance, thriving on limestone soil.” This characteristic of hardiness is undoubtedly due to the fact that the Ronda area is located in high mountain ranges around 6500 feet (2000 m) even though its latitude is equivalent to Norfolk, VA.

There was a recent query about the origin of the name “pinsapo” on an e-mail listserv for educators connected with the American Association of Botanical Gardens and Arboreta. One response included a reference to “soap pine” because the twigs crushed in water produce a soap-like substance. The Spanish-language website www.arbolesornamentales.com says the name derives from *pino* (pine) and *sapino* (fir). This explanation is plausible, given the atypical characteristics of the needles.

In the summer of 1998, I drove from Geneva to Spain with our son and his wife for her sister’s wedding. When we stopped at the first rest area in the Pyrenees in northern Spain, after crossing the border with France, there stood a Spanish fir, completely recognizable to me by this time. Perhaps it had been planted in the rest area’s garden as something unique to Spain—a tourist attraction in itself, at least to conifer lovers.

I continue to have a special fondness for this tree because it reminds me of our connection to extended family in Spain. However, this species is quite worthy in its own right. It is said to be slow-growing, reaching a maximum of 60 feet (20 m), with striking and unusual foliage that is somewhat grayish in color. Not beautiful, perhaps, but extremely interesting. Maybe it’s time to make your own connection with *Abies pinsapo*!

The Graver Arboretum of Muhlenberg College is open to visitors every day, from dawn to dusk. We are located off Rt. 512 in rural Northampton County, about 10 miles north of Rt. 22, which runs across the Lehigh Valley from Easton to Allentown. Guided tours of the conifer collection are available, and group visits should be arranged in advance by calling Laurie Rosenberg, Director of Environmental Education Outreach, at (610) 614-1352.

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**About the author:** Marjorie H. Lauer is Administrative Manager at The Graver Arboretum of Muhlenberg College in Bath, Pennsylvania.
For a tree that would normally grow vertically at a rapid rate, a prostrate pine is certainly an anomaly. While these plants are not nearly as numerous as prostrate junipers, the gardener wanting a pine that grows flat on the ground still has about nine cultivars from which to choose.

A prostrate plant is one in which no leader is ever formed; that is, the plants exhibit strong plagiotropic growth. They look their best when trailing over a wall or on the bank of a hill. While some of these plants will eventually form a mound in the center, they are for all intents and purposes prostrate growers.

Since pine cultivars are normally grafted, it should be noted that prostrate plants can be “created” by taking a cutting from a side shoot of the mother plant, rather than from a more upright shoot. The resulting plant lacks a hormone for upright growth, so it grows prostrate on the ground. Cultivariants created this way are not truly prostrate and are intentionally not included in this article. Since the origin of many cultivars is not known, some of the pines sold as prostrate may have originally been created this way.

Most of the true prostrate pines appear to be from selections of seedlings.

Scots pine (Pinus sylvestris) appears to have the most prostrate varieties, with at least four from which to choose. Scots pine has a large growing range, from USDA zone 3a all the way down to warm and muggy zone 7. A fast-growing prostrate pine is Pinus sylvestris ‘Hillside Creeper,’ growing at least one foot (30 cm) per year. It was a 1970 seedling selection from the former Hillside Gardens in Pennsylvania. ‘Hillside Creeper’ forms a large mat of undulating branches with medium green needles that turn lighter in the winter (see photo inside back cover). A slower-growing cultivar is ‘Repens,’ growing only a couple of inches per year. It was found on Skyland Farm in 1980. ‘Repens’ grows somewhat irregularly and eventually forms a central mound. The buds have a heavy resin coating.

A Scots pine that grows at an intermediate rate is ‘Albys.’ It was selected
at Albyn Nursery in Ohio around 1960. The needles are thick and shiny, retaining their color in winter. Finally, ‘Mitsch Weeping,’ found at Mitsch Nursery in 1985, is normally staked to several feet then allowed to weep, but it will grow prostrate without staking. The plant grows rapidly. As with all Scots pines, Pinus sylvestris is susceptible to Sphaeropsis (Diplodia) Tip Blight, a fungal disease afflicting two-needle pines in the Mid-Atlantic and Northeast United States.

There are a couple of prostrate cultivars of Eastern white pine, neither of which is readily available. There is one called Pinus strobus ‘Prostrata’ (see photo inside back cover) and another called ‘Hillside Weeper.’ The first was discovered in the late 1800’s at the Arnold Arboretum, and the second at Hillside Gardens around 1970.

There is some evidence that Pinus virginiana produced a prostrate form, called ‘Creeping’ or ‘Weeping,’ but it is not currently available in the trade.

There is a prostrate limber pine with blue needles called Pinus flexilis ‘GlaucA Pendula.’ This is probably the only prostrate pine with blue needles. It grows vigorously into an irregular mat with some branches ascending and others descending. Native to the Rocky Mountains, it can be grown from zone 4 to zone 7.

Japanese red pine has only one normally available prostrate cultivar. Pinus densiflora ‘Pendula’ came from Japan and will grow flat on the ground unless staked or grafted high. It has been in cultivation since about 1890. It has dark green needles and orange-red bark. The branches are somewhat brittle, so they should be handled with care. Removing dead material regularly from this plant will help reveal the ornamental bark. The plant is hardy from zone 3 to zone 7.

Another Asian pine, Pinus thunbergii, also has only one prostrate selection, ‘Mt. Hood Prostrate.’ Discovered in 1990 at Iseli Nursery in Oregon, this one grows much more slowly than the species. It has dark green needles similar to the species. Japanese black pine is limited to zones 5 through 8.

Pinus banksiana ‘Schoodic,’ was selected at the Arnold Arboretum in Massachusetts. This is another pine with dark green needles, and it forms a dense mat. Jack pine is native to the zone 2 areas of the north central US and most of Canada. It appears to be able to grow as far south as zone 7.

Finally, we have a flat growing Swiss mountain pine, Pinus mugo ‘Prostrata.’ This one will grow only about 6 in. (15 cm) tall when it is 2 ft. (60 cm) wide. Iseli Nursery found this one around 1985. Mugo pines grow from zone 3 to zone 7.

As with most densely growing conifers, it is important to manually clean out the dead needles and branches from the interiors of these plants to deter mice and other plant-damaging animals. Such cleaning also improves air circulation, which helps prevent disease.

About the author: Dirk is a career patent examiner at the US Patent Office. In addition to collecting dwarf and unusual conifers, he is maximizing native plant diversity on his wooded one-acre lot near Fredericksburg, Virginia.
Durable Plant Labels for Your Conifer Garden
by Orlan Gaeddert

By popular demand, one collector shares his strategy and techniques

Speaking about plant labels, one of my visitors last July said, “They’re all bad!” He spoke like a man of experience, someone with firsthand knowledge of the compromises one makes with any labeling system. Nevertheless, about half of the people in that tour group – most of whom are professionally involved in horticulture – gathered around to find out how I made my plant signs.

Then in September 2002, 156 Conifer Society guests toured the garden as part of the Northeast Region meeting. Once again, dozens of people begged to learn about my technique for producing plant labels. I was surprised because I thought the plants and the rocky setting were much more interesting than my labels. Clearly there are lots of experienced gardeners who have been searching for a better method for labeling their collections. They want something that is both attractive and affordable.

Fortunately, during the last decade new equipment and new materials have made it possible for the hobby gardener to have quality signage, as good as any you might find in an arboretum. In a parallel development, new services have sprung up to offer custom plant labels at competitive prices. Since I wanted my plant markers to have better detailing and more information than what the commercial services offer, I chose to make my own signs.

If you are starting from scratch or contemplating a major re-labeling job, you should be aware that nice labels are a costly project whether you choose the commercial or the home spun route. You can save some money by spending more time, and vice versa. The total real cost might strike you as outrageous at first. But think again; reflect on the value of your collection and the pleasure it gives you. On this scale, even a deluxe plant label has a modest price.

I’ll give you my own “recipe” along with several alternative suggestions. Select any combination that will work for you. The technique I use was adapted from an article by Iza Goroff in the spring 1991 issue of the Bulletin of the American Rock Garden Society, Vol. 49(2). Goroff points out that a finished label has four interrelated elements: the label stock or marker, the text-bearing medium, the printing method and the text itself. All four must work together. (How much text do you need? What is the viewing distance? Do you want a highly visible sign, or is a transparent medium your ideal marker? How long will you need this sign?)
Behind the Scenes
As a first step, if you need a hundred or more signs, the only practical approach is to create a computerized database of your plant names and any other data you wish to include on the labels. I have seen ads for specialized plant databases, but any standard database program will work fine for this purpose. (I like the Alpha Five database program, both for storing data and for creating labels. It is powerful and relatively easy to use but expensive.)

The limited database capabilities included in several label-making programs I’ve seen are too restrictive for my taste, but the one called My Label Premium at $39.95 has many fans. A spreadsheet like Excel will also work nicely to store your plant information.

If you are already familiar with Microsoft Word, this program provides yet another way to do the job. You can store your data in a Word “table” and use the mailing label feature to generate handsome plant labels.

Choosing a Marker
Probably the thorniest question you must face is what kind of marker stock to use. I am referring here to the combination of nameplate and stake that you will ultimately stick into the ground next to your plant. For tiny rock garden gems, some gardeners like to make their own markers using a clear plastic or other media. But for marking trees and shrubs, the commercial products are more sensible.

Check the web for “hosta markers” to get information on several product lines, including one manufacturer of clear polycarbonate markers. Each product has its good and bad features. Balancing one against the other, I have been using two brands, each for a different purpose.

For short-term use and very small plants, Paw Paw markers are adequate. (Label stock from EON Industries is similar.) Their thin galvanized wire stakes are generally good for three years, but don’t count on getting more than five. Another drawback is that the largest nameplate size available measures 1 x 3 inches (2.5 x 7.6 cm), which sharply restricts the amount or size of text you can use. Yet another limitation of Paw Paw markers is that their zinc nameplate is so thin that it is easily

Spray painting a See-Fine marker beige before attaching the label increases the visibility of plant data at normal viewing distance.
damaged. Doubling up – putting two nameplates together – helps alleviate this problem. These are my “quick and dirty” signs. Affix the printed label on the marker, trim as needed, and stick it in the ground.

For long-term use and larger plants, the See-Fine marker is a far superior product. The nameplate is a generous 1.75 x 3.38 inches (4.5 x 8.6 cm), so I can use large type sizes for the plant name and still have room for the extra documentation that I like to see. Both the nameplate and the stake are heavy galvanized steel, which will look good even after 10 years of service. And the nameplate is held at a 45° angle from the stake which enhances viewing. In round numbers, this product costs about three times as much as the Paw Paw stock, roughly an extra 60¢ per marker. But relative to other products I’ve considered, I think See-Fine markers are a bargain.

When they are new, See-Fine markers need a conditioning step before they are used. Give them a bath in hydrochloric acid (also known as muriatic acid) followed by a thorough rinse with fresh water. This process removes the light oil film and “fixes” the galvanized finish so that it is no longer chemically reactive. The acid bath should be just strong enough (a 2 or 3% solution) that bubbles arise when you put the markers in. A three-minute bath is sufficient. Next, I like to dress up the nameplate with a coat of primer followed by one coat of tan colored spray paint, since I use a clear printing medium and like the contrast. If you don’t mind the metallic look, you can skip the primer and painting step. Another alternative to painting would be to print the text on an opaque medium and cover the entire nameplate with that.

Printing the Labels
You will soon be ready to print, but first you must select a medium to print on. I use the Avery line of clear labels for this step and apply them to my painted surface. These labels are self-sticking and available in a range of sizes. Another possibility is the Avery #55XX series of “Weather Proof” plastic labels for laser printing. The latter provide an opaque white background for your text. They are very visible and easy to find in the foliage. For my taste, however,

Some plant names are too long to fit my standard format, so I make a few manual adjustments before printing.
they are too intrusive.

The next step brings us to a hardware question: how will you print the labels? A laser printer is by far the best choice for printing plant labels. The text is very legible and, because the pigment is “burned” into the label medium at high temperature, it will last a long time.

**With the protective film that I recommend, the print should still look good after ten years in almost any exposure.**

Laser text on a clear Avery label should last five years without any protective coating. With the protective film that I recommend (see below), the print should still look good after ten years in almost any exposure. Labels from inkjet printers will have a much shorter life under harsh outdoor conditions, since the ink is water soluble. If you don’t own a laser printer, you can probably rent or borrow one. I called the nearest Kinko’s and found that I could use their computer and printer for 20¢ per minute. If you have set up your work properly in advance, you can run off quite a pile of labels in 30 minutes.

**What to print?**

On a small nameplate, unless you use a small typeface, you probably cannot fit more than the plant name itself. However, I can fit four lines on the large See-Fine marker: (1) Genus and species in 22-pt. bold italic type; (2) Cultivar in 22-pt. bold; (3) Common name in 15 pt. bold; and (4) Year acquired and source code in 14 pt. bold. The maximum printable area must, of course, be limited to a rectangle that is a bit smaller than the nameplate you will be using.

**Customize**

I employ several tricks to place the text neatly on the marker. Cut the printed labels slightly larger than the nameplates to give yourself some wiggle room. Hold the label in the waste area at left and right ends to reduce debris and fingerprints where you don’t want them. You trim off the excess later. I print a small mark in the waste area at the upper left corner which serves as a positioning guide. Edges are easier to align than text.

One reason labels can be so labor intensive is that your formula may only work for 80% of your plants. It’s that last bunch that gives you fits. If a name is too long, you’ll have to reduce the point size or create an extra name line and give up something else, or compromise by using an abbreviation. Adding a subspecies designation is another complication that forces a format change. The wonderful thing about making your own labels is that you can make these judgments better than any commercial operator and end up with a truly superior product!

**Long-lasting labels**

To produce a label with a ten-year or longer life expectancy, I add one more step to the process immediately after printing. Since the labels come out of the printer in 8 x 11-inch sheets, I put a polyester laminating film over the entire sheet. The product I use is called Cleer-Adheer, manufactured by C–Line Products. (Use their website, listed in
References, to locate dealers.) Cut out the individual plant labels, affix each to a plant marker and trim it back to the nameplate with a single edge razor blade or razor knife. Then admire your handiwork, and enjoy!

Final considerations
While the focus of this article has been on plant signage that you can make yourself, every good garden seems to have a few plants so special that they deserve a distinctive touch. At the National Meeting last year, when we visited Tom Cox’s arboretum in Georgia, I spotted a couple of plants that Tom honored with engraved brass markers. Equally outstanding are the signs made by Gregg Gulden of Suncrest Gardens. Suncrest is a regular advertiser in our Conifer Quarterly.

Plant signage, by the way, is an evolving story. New materials and new production methods will continue to surface. One specific area where I hope we will see improvement is in making markers more re-useable. Advanced adhesives may be the key to this.

For countless years, a 10-year marker was the holy grail. While we have now achieved that goal, the sad truth is that the average useful life of a sign may be only four or five years. Animal damage and accidents happen. Plants grow, or sometimes die, and taxonomists change their names. Our tastes change, etc. So easy recycling of a good marker would be a nice quality. I hope that in a couple of years someone reading this – maybe you – will bring us up to date.

My thanks to Justin C. “Chub” Harper for sharing his experience and knowledge of various markers and how they perform.

References:
EON Industries Inc., PO Box 11, Liberty Center, OH 43532; (419) 533-4961.
My Label Premium software is available at office supply stores or from www.elibrium.com.
Paw Paw Everlast Label Company, PO Box 93, Paw Paw, MI 49079; www.everlastlabel.com.
See-Fine Marker Company, 1009 N Street, Lewiston, ID 83501; (208) 743–2137.

About the author: Orlan Gaeddert has been collecting dwarf and unusual conifers for more than 30 years. He will be retiring from the board of directors of the Society later this year after serving for the past five years. He invites your feedback and questions about this article; contact him by calling (518) 781-4662 or sending e-mail to orlag@taconic.net.
I first caught “coniferitis” when I was asked to help write a grant proposal for the Jean Iseli Memorial Award on behalf of Milwaukee Area Technical College-North Campus in Mequon, Wisconsin. I admit that at first, I was skeptical. Not about the merit of the award, nor the importance of achieving it, but of my ability to fulfill such a commitment. I had never written a grant proposal, and my knowledge of conifers was but a “drop in the bucket.” With little experience or knowledge of the plant group, I accepted the challenge, and it turned out to be a delightful journey.

The project
Our grant award was used to create the official MATC Conifer Garden, located on the east lawn of North Campus. With the support of MATC for signage, we were able to dedicate the entire grant to acquiring conifers. Then, with further generous donations from Rich and Susan Eyre of Rich’s Foxwillow Pines Nursery, our “wish list” expanded from 23 to 36 plants.

In keeping with the MATC Horticulture Department’s mission to prepare students to enter, advance in and succeed in landscape horticulture, this collection will be invaluable over the years.

Horticulture student Sherry Maul inspects the needles of Pinus banksiana 'Uncle Fogy' in the Milwaukee Area Technical College’s new Conifer Garden.
The grant increases our conifer collections on campus, providing vibrant plant specimens for students to observe. We believe that students will, in turn, introduce and promote the beauty and value of conifers to their future clients.

**Student involvement**
Many students joined in the adventure on planting day. Despite a gray and gloomy sky and unseasonably cool temperatures, enthusiasm filled the air. After the plants were unloaded, Rich Eyre passionately promoted the values and aesthetics of garden conifers and the people behind them. Once the students were sufficiently infected with “coniferitis,” and armed with placement tips from Rich and MATC Horticulture Instructor and Conifer Project Chairperson Mike Wendt, they pitched in to place the plants in the area they had prepared in advance.

The site includes some wind protection for the more “finicky” specimens, shade for the conifers that require it, and a good-sized dollop of full sun. A patio laid by the construction classes nestles in the center of the collection, providing a perfect spot to view and reflect on the plants’ beauty.

**Public awareness**
We don’t intend to hold this collection captive, however. It is open to all students, instructors and staff, of course. But the collection is also conveniently located and available for viewing by the general public. The campus gardens, which include the Hosta Collection as well as deciduous and coniferous plants in the Alice-In-Dairyland Garden, become more popular each year. As the total garden area continues to grow, the influence of the MATC collections and particularly the Conifer Garden will enhance the awareness of all visitors over the coming years.

Mike had warned me that I would become addicted to conifers during this project, and he was right. But the impact of the Conifer Garden on our entire campus community has already been greater than we imagined.

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**About the author:** Susan Radke is a recent graduate of the MATC Horticulture Program, and is Owner of New S-Scapes Landscape Designers, LLC.

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**The MATC Conifer garden can be viewed at 5555 W. Highland Road, Mequon, WI (north of Milwaukee). For more information, contact Mike Wendt at wendtm@matc.edu.**

MATC wishes to publicly thank the Conifer Society; Rich and Susan Eyre, owners of Rich’s Foxwillow Pines Nursery; Susan Radke of New S-Scapes Landscape Designers, and the MATC-Horticulture Department staff and students who made this project possible.
People and plants move more quickly between regions on the globe today than they have ever done before. This has good and bad aspects associated with it. The good is our improved ability to rapidly acquire new, rare, exciting and different plants. The downside is when these plants bring along pests which have no natural enemies, or the plants themselves become invasive in their new environment.

The Challenge: Maintain the auctions as fun-filled opportunities for members to acquire desirable plants and as sources of much-needed revenue for the Conifer Society, while being responsive to new information and complying with evolving plant regulations.

The Opportunity: Develop diversified and innovative auctions that provide a larger percentage of attending members with new creative opportunities to obtain plants, combined with the potential for new sources of revenue for the Society. We can all become part of the solution and not part of the problem, while we protect the plants we cherish, the Conifer Society, and the ability to continue to conduct fun-filled plant auctions.

The Path Forward
The auction at the Denver Meeting poses a particular challenge, since most of us will be flying directly to and from the meeting and many may be continuing our travels (e.g. the Coach Post-Conference Tour) before returning home. Therefore, this meeting is the ideal opportunity to try some new approaches to the auction. A diversified auction could be a combination of live plants, “virtual plants,” gift certificates and other items listed below.

Several individuals have already offered imaginative suggestions that would avoid the shipping and handling of plants at auctions. In addition to direct shipping of plants from grower to the successful bidder, there may also be opportunities to accomplish cost-effective delivery of plants via regional nurseries for pick-up by the successful bidder.

If details can be resolved, regional consolidated shipping destinations could create the opportunity to offer larger sized specimens or one-of-a-kind plants via the auction. At this time, many issues remain open and their resolution will take the hard work of many cooperative individuals.

Any of the following suggestions could be used at the preference and discretion of the donors:
• Gift certificates and/or discount coupons, accompanied by a nursery catalog or plant list.
• Conifer-related books (new, out-of-print, autographed, etc.).
• Specialty items (e.g. personal consulting, expert visits to homeowners’ gardens, grafting or pruning lessons, custom plant labels, private tours of nurseries or gardens, etc.).
• Bringing one plant for the silent auction (with duplicates retained at the
Bidders
Increase your awareness. Information will be available for members at the meetings to help you determine which conifer species have problems or should not be transported to your state without proper nursery certificates.

Donors
Innovative auction approaches are needed. Donors are asked to review applicable regulations for plant shipments between the states. It is highly desirable for each plant to have a point of origin (original or photocopy) nursery stock certificate or phytosanitary certificate as applicable. The plants should be labeled with the correct botanical name and cultivar name (when applicable). The use of common names is optional. A careful visual inspection of the plants using a hand lens prior to transport is prudent.

The National Plant Board (NPB) website contains a great deal of useful information. Access their website at www.aphis.usda.gov/npb/F&SQS/sqs.html. This URL is also a hotlink from the Conifer Society website (www.conifersociety.org); click on the “Links to Sites of Interest” and go to “Reference Links.”

Plant regulators have informed me that conifers have fewer pest problems than many other types of plants; therefore we ask that donors minimize the amount of non-conifer plant material brought to the auction. For logistics and insurance reasons, plants brought to the auction should be limited in size to a maximum of a 3-gallon container (or an equivalent ball and burlap in size and weight). However, plants which aren’t physically present at Conifer Society auctions but are auctioned via photos or descriptions are of course exempt from these recommendations.

Every Member
Your assistance and ideas will be needed to help our auction evolve, so that for years to come, we can continue to enjoy the plants we cherish and lust after! Many of you have attended other organizations’ fund raising events and may know of other aspects we need to be considering. Please bring those ideas to the attention of our regional or national officers, board members or meeting organizers.

Come to Denver and be part of the excitement as many clever and dedicated people work magic in ways we have never tried before. Thanks in advance for your help and ideas!
Western Region Hosts Conifer Education Day and Other Events
by Randy Oster, Western Region president, and Rita Freeman

Yard Garden & Patio Show
February 6-9, 2003
The Western Region manned a booth at the Portland Oregon Yard Garden and Patio Show in February. Attendance at the show was over 45,000 and provided the perfect opportunity for a membership drive and fundraising plant sale.

Conifer Education Day at The Oregon Garden – March 8, 2003
The Western Region kicked off a new education program on March 8th at the Oregon Garden. The goal of our education program is to provide assistance to the horticulture departments in our local schools by providing students the opportunity to gain practical experience in gardening and to expand their knowledge of conifers.

To accomplish this, we invited 12 students and three instructors from high schools and colleges in the area to attend as our guests. Don Howse and Hugh Ferrar led the student tour groups through the garden, providing a wealth of knowledge about The Oregon Garden Conifer Garden. The students witnessed first hand the cooperative efforts of our members who turned out to work at our annual Conifer Garden Clean Up Day. The students joined us for lunch and our education day lectures.

During this event, The Western Region presented The Oregon Garden with $1000.00 to fund continued improvements in the Conifer Garden.

Talon Bucholtz treated us to a slide program on new plants he encountered on his recent Europe trip, and Don Howse presented a slide presentation featuring the Colorado Windy Ridge Bristlecone Pines and The Limber Pine Grove.

The 2003 Western Region Fall Event will be held the first week of October at Monrovia Nursery in Dayton, Oregon.
“A Coniferous Affair”
October 4, 2002
The Conifer Autumn Fest, dubbed “A Coniferous Affair,” was hosted by Larry and Marlene Stanley at Stanley and Sons Nursery. Despite the drizzly Oregon weather, attendance and spirits were high, and the excitement and anticipation of the tours, program, and Asian Rim Cuisine dining pushed on right through the Plant Auctions.

The program began with a tour of the 10-acre Stanley and Sons Nursery, which includes a one-acre display garden with over 3000 varieties of conifers and 400 varieties of maples. Larry Stanley led the tour, sharing insight into the production and history of his nursery and plant collection.

Don Howse led the tour of the Jerry Morris Collection at the nursery and was joined by surprise guest, Jerry Morris. This was truly a treat as we were able to hear first-hand Jerry’s stories about collecting these specimens in the mountains of the Western United States from witches brooms and sports.

Don Howse led the tour of the Jerry Morris Collection at the nursery and was joined by surprise guest, Jerry Morris. This was truly a treat as we were able to hear first-hand Jerry’s stories about collecting these specimens in the mountains of the Western United States from witches brooms and sports.

The Bonsai demonstration featured Joe Harris III, developer of Iseli Nursery’s Matsunami-en Bonsai Division, and his collection of amazing and beautiful coniferous bonsai trees. Mr. Harris is a highly respected teacher and lecturer in the Bonsai world, having begun his career at age 11 with training at Brussel’s Nursery, then going to Japan to study for four years under master Makoto Hashimoto at the Kanuma Shizen Bonsai Koen in Tochigi prefecture. His demonstration of pruning and wiring techniques on a twenty-year-old Juniperus chinensis ‘Itowigawa Shimpaku’ provided an opportunity for learning new techniques and honing bonsai skills. His presentation lasted most of the afternoon – through dinner, through auctions and into the clean-up stage of the event. The generosity of his time offered all in attendance the opportunity for one-on-one discussion with Joe on the progression of this bonsai project.

After dinner, we were introduced to the new Western Region board members – president Randy Oster, vice-president Susan Schouten and secretary/treasurer Darrell Massung. Also in attendance was national president Dennis Groh, who introduced a distinguished group of past national presidents – Marvin Snyder, Bob Fincham, and Larry Stanley.

Award announcements were made by Marvin Synder, Dennis Groh, and Peter Conrad from left: Randy Oster, Western Region president; Marvin Snyder, national past president; Dennis Groh, national president; and Don Howse, recipient of the President’s Award for Volunteerism in the Western Region.
Don Howse. John Mitsch received the 2002 ACS Award of Merit for Development in the Field of Conifers, and Larry Stanley received the 2002 ACS Award of Merit for Dedicated Support. Then Don Howse was presented with a new regional award, The President’s Award for Volunteerism.

The Verbal and Silent Plant Auctions were a much anticipated success. Verl Holden and Don Howse shared auctioneer duties, with Cindy Lou Pease presiding over the can raffles. Thanks to all our plant donors who supported us with plants for the auctions.

A successful new membership drive included offering a choice of two plants from a pool of plants provided by Porterhowse Farms, Evans Farms, Stanley and Son’s Nursery, and R & R Nursery. We signed a total of 16 new individual and family memberships at the event. Thank you to the plant donors who supported our membership efforts.

Denim shirts and hats embroidered with the Conifer Society logo were a big hit and provided an additional avenue for fundraising.

Attendance at the event totalled 133 people and included members Alice and John Zawacki from Wellfleet, MA, as well as Western Region members from Colorado, Idaho, Washington and California. Thank you to all of our volunteers who worked so hard to make this a successful event. Volunteers are the lifeblood of the organization and nothing would be possible without you.

FOR SALE: GRACEFUL GRACE
(Pseudotsuga menziesii ‘Graceful Grace’)

This is probably the largest ‘Graceful Grace’ in the world. It was one of the first grafts from the original plant, which was found in a Christmas tree plantation. That original tree was bought and moved to the Masonic Home in Columbia, PA, but has since died.

This tree was grafted and grown by the late Layne Ziegenfus of Lehighton PA. It is approx. 30-35' tall with an 8-inch caliper. It is a fast-growing weeping Douglas Fir with very strong vertical growth but graceful weeping branches. The needles are a darker green than most other weeping Douglas Fir cultivars.

For a picture and price please call Frank Tubiello at 610-847-5787 or e-mail frankt2@ptd.net.
We invite all society members to join us in June in Illinois.

Our keynote speaker Ed Lyons is the Director of Education at Olbrich Botanical Gardens in Madison, WI, and co-owner and horticulture consultant for Stonewall Nursery in Oregon, WI, which specializes in dwarf conifers and unusual deciduous trees and shrubs.

Gary Whittenbaugh, Central Region president will do a trough planting demonstration. Gary has been busy with over 20 conifer and associated presentations throughout the western half of the Central Region since early January. Dennis Groh and Don Wild from Michigan (national president and vice-president) will join forces with a presentation on gardening with conifers.

Rich’s Foxwillow Pines Nursery Inc. has a special treat in store for us. In addition to our Saturday visit we are invited to join Rich and Susan Eyre for a Sunday morning continental breakfast at their new farm and conifer garden in Woodstock. The Eyres now have two locations, just three miles apart, both chock-full of conifers. And within a few minutes of Rich’s Foxwillow Pines are three great gardens for Saturday tours.

Friday’s Conifer Symposium, sponsored by Rich’s Foxwillow Pines, features Bill Hendricks of Klyn Nursery, Ohio, Chamaecyparis the Genus; Jerry Morris, Colorado, Transplanting Trees and the Soils They Live In; Joe Stupka, Pennsylvania, Witches’ Brooms and Other Wisdom; and Dennis Dodge, Connecticut, New Rare and Unusual Dwarf Conifers. Rich’s Foxwillow Pines will be open for member visits Friday morning prior to the afternoon Conifer Symposium.

The Central Region Conifer Society Member Meeting and Conifer Symposium agenda and registrations were mailed to all Central Region members in mid-March. The early registration deadline is May 10, 2003.

Please see the Society’s website (www.conifersociety.org) for complete agenda and registration information, or you may contact Charlene Harris at (734) 433-9773 or charris@provide.net for additional information.

The Holiday Inn Crystal Lake is located 50 miles northwest of Chicago. For hotel reservations, call (815) 477-7000, fax (815) 477-7027, or visit www.holidayinn crystallake.com.

Guest room rate is $92.00 plus tax for single/double room.

Iowa Garden Rendezvous – June 29, 2003
It’s time to make plans to attend the fourth annual Iowa Garden Rendezvous to be held at the garden of Craig and Deb Jacobson on Sunday, June 29, 2003. This is a local event for all conifer and plant enthusiasts to meet each other, talk about plants, visit gardens, take pic-
tures, see new plants, get ideas and just have a good time.

The Jacobsons have a wonderful conifer garden and a beautiful collection of hostas and daylilies.

Paula Flynn from the ISU Plant Disease Clinic with assistance from Gary Whittenbaugh will be on hand from 10:00 AM to 1:00 PM to answer questions regarding your conifer or other plant disease problems.

In addition to Craig and Deb’s garden, there will be five other gardens to visit – two in Marshalltown, two in Grinnell, and one in Alleman. When you arrive at Jacobson’s we will have the souvenir Rendezvous handout folder with garden descriptions, maps, directions, and the hours the gardens will be open to visit.

Craig has made arrangements to have lunch catered at their place from 12:00-1:00 PM for $5.00.

Should you have any questions, contact Gary Whittenbaugh at (319) 283-3050 or franmara@trxinc.com.

The event will run from 10:00 AM to 4:00 PM. Craig & Deb Jacobson’s property is located at 2554 Dillon Rd., Marshalltown, Iowa 50158.

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Morris Arboretum
The first stop of the garden tour of the September 19-20 meeting of the Northeast Region will be the Morris Arboretum, near Philadelphia. Founded in 1887 as the private estate of brother and sister John and Lydia Morris, the Arboretum is now owned by the University of Pennsylvania, and it is the official arboretum of the Commonwealth of Pennsylvania.

John and Lydia traveled around the world seeking new plants and ideas for their 92-acre estate. They were particularly interested in the flora of Asia, and they acquired plants collected in China by E. H. Wilson at the turn of the century. Therefore, there are numerous examples of spectacular, mature specimen trees in the Arboretum today, including many of the Delaware Valley’s “trees of record” (the largest of their kind).

The Morris Arboretum is said to be one of the best examples of a Victorian eclectic garden in the country and is listed on the National Register of Historic Places. Eclectic elements include a delightful Victorian glass house fernery, a rustic log cabin, a swan pond with a love temple and Japanese rock gardens. There is a beautiful, formal rose garden bordered on one side by a head-high retaining wall, densely planted with a variety of rock garden plants.

One of the more recent additions to the Arboretum is the “Garden Railway,” where G-scale model trains have been skillfully interwoven throughout the already well-established dwarf conifer collection. The trains are able to run in any weather, even snow. This is really quite an extensive and impressive display.

Of course, conifer enthusiasts will not be disappointed. Along with awesome mature specimens, the Arboretum continues to add to its collection by constantly planting new conifers. [Editor’s note: See the article on page 5 of this issue to read about the fir collection.] Of particular interest are an enormous blue Atlas cedar and a mature Korean pine with its bottom half growing normally and its top half growing as a fastigiate; from a distance it seems as if the top of the tree is a huge witches’ broom. Conifer enthusiasts will likely be intrigued by several mature long-leaf pines (*Pinus palustris*), native of the southeast U.S. and rarely seen this far north. The needles of these specimens measure up to 18 in. (46 cm) long.

Martin Brooks’ Rare Plant Nursery
When Martin Brooks set out to create his arboretum, he wanted display gardens to which landscape architects could bring their clients to show them unusual specimens. Now that the original plantings have matured, he can display full-sized examples of rare conifers, Japanese maples, beeches and much more in a magical setting.

One of the best specimens is a weeping silver fir (*Abies alba* ‘Pendula’) that J.R.P. Van Hoey Smith told Marty was...
the best he’d ever seen. His lacebark pine (Pinus bungeana) is the best I’ve ever seen, and he’s even got a fine example of the rare compact form. Marty’s personal favorite is a gorgeous weeping Alaskan cedar (Chamaecyparis nootkatensis ‘Pendula’) that was shown on page 184 of the Fall 2000 Bulletin (Vol. 17, No. 4) and is reprinted below.

Marty has always tested the limits of winter hardiness, so the arboretum includes large trees of Cunninghamia lanceolata, Sequoiadendron giganteum, Abies pinsapo ‘Glauca’ and other plants not considered reliably hardy in zone 6.

Marty says he has every Oriental spruce (Picea orientalis) except for one, but that one is on its way. He continues to expand the garden, having recently added large beds to display his new collections of Serbian (Picea omorika) and Oriental spruces. His Picea orientalis ‘Bergman’s Gem’ is five feet wide.

Adjacent to the arboretum and shading the Brooks’ home is a beautiful woodland garden of mature, native hardwoods with an understory of hollies, bamboos and wonderful groundcovers. Those of us with large deciduous trees to garden under will get plenty of design inspiration from this area.

The overall design of the garden is as notable as the individual specimens. It’s easy to get caught up in the excitement of seeing so many amazing plants and forget to stand back and appreciate the genius of this arboretum’s design. With or without a master plan, any garden of this size and complexity must be constantly evolving. From a design point of view, the arboretum has evolved beautifully. The proportion of large mature trees to beds of lower plantings to open lawn is masterful. Arrangements of tall, dense plantings entice visitors to discover what’s around the corner. The ratio of conifers to deciduous trees including maples and beeches seems just right.

While most of the plants are perfect specimens with plenty of room to grow, others are allowed to blend together and create beautiful tapestry effects. Marty’s extensive plant knowledge aided him in designing his arboretum. One example is the multiple plantings of the columnar form of blue Atlas cedar (Cedrus atlantica ‘Fastigiata’). Normal blue Atlas cedars surely would have grown too large to grow in these areas, but Marty’s mature, columnar trees make a powerful

Marty Brooks poses in front of a weeping Alaskan cedar in his arboretum.
design statement while co-existing happily with other trees.

Any Conifer Society member who hasn’t been to see Martin Brooks’ Rare Plant Nursery should do whatever it takes to get to the Northeast Region fall meeting, showcasing one of the world’s greatest conifer collections.

Martin Brooks’ Rare Plant Nursery in Bucks County, Pennsylvania, will be the third tour destination for the September 19-20 Northeast Region meeting. The first two stops will be the Morris Arboretum (also described in this article) and Ridge Goodwin’s Half Moon Nursery and gardens. While all three collections are superb, this really is an example of saving the best for last! While the acreage isn’t vast, Martin Brook’s collection is so extensive and important for conifer enthusiasts that one could spend all day there. Its close proximity to Ridge Goodwin’s property ensures plenty of time to enjoy our final destination.

About the author: Kevin Hasney’s densely planted garden in New Hope, PA, was featured on the 2001 Northeast Region conference tour.

Fresh Eyes Recap the Fall 2002 NE Region Meeting

Report by Karen and Phil Zimmerman

As first-time attendees to the ACS Northeastern Region 2002 Meeting held in Lenox, Massachusetts September 20-22, 2002, we knew we had arrived at the right place when we walked into the hotel lobby and overheard two people talking about witches’ brooms – and it wasn’t even the end of October.

As members of several local and international plant societies, we are no strangers to plant study weekends. For several years we had looked at the Conifer Society’s meeting announcements but did not take action, questioning whether we knew enough about conifers and wondering if we would feel welcome. But last September we decided to take the plunge, register for the meeting and walk through the doors of the Quality Inn that bright and clear late September day in the heart of the beautiful Berkshires. We were certainly not alone! Over 150 members came to the meeting, including a large number of first-time attendees.

People were warm and welcoming and eager to share their growing experiences. The high-quality presentations were fresh and informative. And the plants... well, the plants were just unbelievable. The silent auction, the verbal auction and the tailgate sale were worth the trip from anywhere! We brought home plants we hadn’t known existed until that weekend.

During Friday evening’s light buffet supper, we all had a chance to peek at
the abundance of auction plants that were placed around the perimeter of the room. Very exciting! The selection was grand in terms of both quantity and quality. People began to eye such treasures as *Chamaecyparis obtusa* ‘Cream Tart,’ a variegated bun of such deep green and pure white scales as to make one’s heart stop.

The evening program included a presentation by Phil Perrone, who took us to Taiwan to view some great conifers he found growing in the mountains as part of his participation in the Dendrological Survey of the island, which has one of the most diverse concentrations of flora on the planet. M. Dolores Holland, Director of the Northeast Chapter of the American Bamboo Society, proceeded to introduce us to the wonderful world of hardy bamboo. Her presentation was followed by a unbelievable parade of slides presented by Dennis Dodge, Jay Angle and Wayne Mezitt, introducing the audience to the newest of the new, not yet available conifers to be looking for in 2003. We sat and listened with wide eyes and open mouths! We enjoyed every minute.

Saturday’s well-planned events involved three buses winding their way through the backroads of New York and Massachusetts. We were welcomed to the garden of Doris and Bud Rosenberg, with its memorable specimens of *Picea concolor* ‘Piggelmee’ and two rare forms of *Abies pinsapo* var. *marocana*, the Moroccan fir. Next, owners Dennis and Judy Mareb of Windy Hill Farm in Great Barrington graciously toured us through their well-stocked sales yard. Dennis introduced us all to his restored antique apple press, now used to make fresh apple cider to sell at the shop in season.

The home of LouAnn and Orlan Gaeddert in Canaan, New York boasts a spectacular east-facing hillside with native and rock garden plants and conifers combined with stone and well crafted paths, leading the visitor to some of the best-grown plants they are likely to find anywhere. At the top of this dramatic slope, we found a jewel of a conifer mound known as *Picea abies* ‘Cohassot.’ (We just had to have one, and after the meeting we headed straight away to Bethlehem Nursery in Connecticut!) We were in heaven and really enjoyed both Orlan and LouAnn’s warm hospitality.

Saturday evening brought the verbal auction. Quite frankly, we have never seen better plant material brought before a more appreciative audience than we

Tour participants follow a trail through Orlan and LouAnn Gaeddert's hillside garden during the Northeast Region’s Fall 2002 conference tour.
saw that night. We cannot do justice in print to the items auctioned to the highest bidders that evening.

We were delighted to find the fun continuing on Sunday morning with the tailgate sale beginning at 8:00 AM. Of course, the hovering hordes of conifer growers were out early – forget about breakfast! – to check out the material. And what a selection it was. Expert growers had the best of the best on hand.

Needless to say more, we totally enjoyed ourselves and can’t wait for the next event. Overall, this seemed a singularly well-planned event with an appropriate pace and excitement level. Meeting co-chairs Orlan Gaeddert and Peter Rumora and registrar Sandy Magyar are just three of the many people to whom we owe thanks for making this such a special event. It’s invaluable to see mature forms of conifer cultivars growing in beautifully crafted gardens you might otherwise never see.

We would certainly encourage, nay implore, everyone who loves conifers and their companion plants to attend the next meeting. You will come away with some plant treasures, long lasting memories and new friends. As we look out the sliding doors to our rooftop garden and dote on the plants we were privileged to bring home, we feel extremely fortunate to have participated.

About the authors: Karen and Phil Zimmerman grow their collection of conifers on a rooftop in Manhattan, alongside their collections of ericaceous, alpine and woodland plants.

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Southeast Meeting Draws Record Attendance
by Jane Frampton

On Friday evening, September 27, 2002, meeting organizer Jordan Jack welcomed a record 60 Conifer Society members to Asheville, North Carolina, for the Southeastern Region meeting. Jordan gave special recognition to members attending from other regions and presented conifers to those traveling the farthest – Ed Hughes from Michigan and Manuel Torres from Florida.

Following a light buffet, short show-and-tell programs were presented by Maud Henne, Southeastern Region secretary/treasurer, Jordan Jack and Dennis Groh, national president.

On Saturday morning, a well-orchestrated car-pooling caravan snaked its way through hilly Asheville to Peter and Jasmine Gentling’s terraced hillside gardens. Of the 20 or so acres, Peter explained, three acres are carefully tended, with the source of many plants being the Gotelli collection. After acquiring the property 31 years ago, the Gentlings uncovered six of the original terraces that, over years of neglect had been covered in natural vegetation. Little by little, they have tamed the property, accenting the 100-plus year overstory with Japanese maples, boxwoods, conifers, perennials and a vegetable garden.

With the weather cooperating fully, providing a perfect autumn day, a cookout at the home of Jordan and Bennett Jack was a welcome respite for lunch. In a woodland setting, the Jacks have etched out a camellia, azalea and conifer paradise on the side of a mountain, above the site of their now retired nursery, Washington Evergreen Nursery. ACS members strolled about prior to lunch and afterward in the lower area where most of the conifers were displayed.

From there, the group traveled to the home and garden of John and Tina McGuire, who, in 1989, built the home on property that had been a vacant lot between two existing homes. They decided how to site the home, driveway and gardens. Michael Balogh, the Southeastern Region president from Weaverville, NC, has been their landscape designer, and has artfully installed attractive displays of conifers and other unusual plants to complement the lovely tudor-style home.

Then, it was back to the hotel for the banquet and plant auction. During the opening presentations, Jordan Jack won the raffle of the Pinus parviflora ‘Oculus-draconis.’ Teresa Ford was introduced as the new Southeast Region vice-president.

Dennis Groh, in his new role as president of the Conifer Society, made a commitment to attend each region’s meeting this year. He spoke about the purpose of the Society, its position as a non-profit plant society and about volunteerism. He showed many slides of active members and plants-people participating in Society events and expressed his wishes for members to find a way to help the organization and become more involved. He finished by awarding Jordan Jack the President’s Award for Volunteerism, much deserved.
for Jordan’s tireless efforts toward the Society over the years.

Soon after the opening remarks, the auction began with Michael Balogh as auctioneer. Many fine plants were available and bidding throughout the evening diminished their numbers from the display tables. While Michael tried in vain to auction a “prized” variegated kudzu plant, the crowd instead preferred the pines, cryptomerias, hemlocks and other conifers. The auction brought in over $2,700 for the region. With the best turnout for a Southeastern Region meeting, many people went home with their own new additions to their gardens and a respect for a few of Asheville’s previously undiscovered secret gardens.

Author info: Jane Frampton lives and gardens in Apex, North Carolina. She was Editor of the Conifer Society’s *Bulletin/Conifer Quarterly* from 1999-2002.

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**Southeast Region News**

by Michael Balogh, Southeast Region president

Flo Chaffin came back from the Feb. 1 board meeting in St. Louis energized and inspired. She has persuaded Georgia State Botanical Gardens to establish an arboretum featuring dwarf conifers and is looking for plant donations. Flo is also offering a “Hypertufa 101” class, the cost of which will include membership dues for the Conifer Society.

Pam Loud has secured a booth for the Society at the Southeastern Flower Show, where we hope to attract more new members. I will be manning a booth at the Blue Ridge Horticultural Association plant show, promoting the use of dwarf conifers.

I have met with some folks from East Tennesse University who are moving forward with development plans for an arboretum that will include dwarf conifers. I will let you know how this progresses.

Teresa Ford, our vice-president, is sending out the Region’s first newsletter this Spring.

Looking through the Conifer Society Membership Directory, I noticed how few members we have in Alabama, Florida, Kentucky, Mississippi, South Carolina, and West Virginia. I would appreciate hearing from anyone with information on gardens, garden shows or other places of conifer interest in these states.

Spring should bring many opportunities to increase Conifer Society exposure and membership. The daffodils and forsythia are blooming, so it looks like Spring is loosening Winter’s grip. Now things start to get busy!
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Dennis Groh, 160 S. Evangeline, Dearborn Heights, MI 48125  
PH (313) 561-2315  E-mail: dgroh18380MI@comcast.net

**Vice President/Treasurer**  
Don Wild, 3058 Cross Creek Ct., Ann Arbor, MI 48108  
PH (734) 662-6461  E-mail: louwild@aol.com

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**Term expires 2003**  
Orlan Gaeddert, P.O. Box 25, Canaan, NY 12029  
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Dennis Groh, (see President above)

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Lester Wyman, 86 Tavern Waye, Hanson, MA 02341  
PH (781) 447-3579  FAX (781) 447-3758  E-mail: hansplits@attbi.com

**Regional Presidents**

**Northeastern Region**  
Ridge Goodwin, PO Box 310, Holicong, PA 18928  
PH (215) 794-3216  FAX (215) 794-7104  E-mail: ridgegoodwin@rcn.com

**Central Region**  
Gary Whittenbaugh, 625 3rd Ave. SW, Oelwein, IA 50662  
PH (319) 283-3050  FAX (319) 283-4773  E-mail: franmara@trxinc.com

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Randy Oster, 29600 Kowall Rd., Estacada, OR 97023  
PH (503) 630-7975  FAX (503) 630-7955  E-mail: sales@r-r-nursery.com

**Southeastern Region**  
Mike Balogh, 40 Elkins Branch Rd., Weaverville, NC 28787  
PH (828) 626-2695  E-mail: tsugahead@aol.com

**American Conifer Society Staff**

**ACS Office**  
John Martin, P.O. Box 3422, Crofton, MD 21114-0422  
PH (410) 721-6611  FAX (410) 721-9636  E-mail: conifersociety@aol.com

**Editor, Conifer Quarterly**  
Anne Brennan, 1820 Bridgetown Pike, Feasterville, PA 19053  
PH (215) 364-0566  FAX (215) 827-5926  
E-mail: ConiferQuarterly@contextcomm.com

**National Meeting Coordinator**  
Charlene Harris, P.O. Box 519, Chelsea, MI 48118-0519  
PH (734) 433-9773  FAX (734) 433-5442  
E-mail: charris@provide.net

**www.conifersociety.org**
Pinus strobus ‘Prostrata’ (above) and Pinus sylvestris ‘Hillside Creeper’ (right) are two of nine prostrate pine cultivars described in the article on page 24.
Above: Abies concolor ‘Creamy’
Below: Abies concolor ‘Archer’s Dwarf’

Abies nordmanniana ‘Golden Spreader’ in Ronald Vermeulen’s garden in Deil, Holland. (See article on page 10.)

Abies koreana ‘Aurea’

Abies pinsapo ‘Horstmann’