



# ECA NEWS

Quarterly Publication of Exotic Conifer Association

Vol. 1: No. 4

## ARBORETUM ON BLUE HILL HOSTS ECA FALL FIELD DAYS, SEP 29 & 30

Don Hilliker, one of the ECA founders and exotic pioneers is our host for this rare opportunity to see, feel, smell and learn about a variety of exotic conifers. We are meeting at the Arboretum on Blue Hill, 10745 Hilliker Rd., Delevan NY 14042. The Arboretum is old and well established. It is a sanctuary extending over 300 acres.

For more than 50 years Don Hilliker has been a fixture in the exotic conifer movement, collecting, growing, selling and teaching others about growing exotic coniferous trees. Many of his best exotics have matured and are growing, happily, in the natural setting of the Arboretum on Blue Hill. The Arboretum is a haven for beautiful trees, particular exotic conifers, and the birds and animals that inhabit them.

If you ever wondered what a specific exotic looks like, which particular variety will thrive on your farm and how to care for them, whether a particular species has commercial potential, then ECA Fall Field Days are for you. Here is your chance to get answers from Don. He knows.

Join us for a leisurely walk among these beautiful trees, many in mature form. There is so much to see. Learn the history of these magnificent specimens. Draw from Don's insights and the lessons he learned. This is the time to ask all your many questions and get answers gleaned from years of successful experience with exotics.

You will see a number of mature exotics with cones including Fraser Fir, Korean Fir, Turkish or Trojan Fir, Nordman Fir, Noble Fir, Concolor Fir - Heavenly Blue, Alpine Fir - Colorado, and Grand Fir - Clearwater, ID. Some of these are close to one another so our members can see several at the same time.

Don Hilliker and his wife (now passed) established Tree Haven Nursery and for many years were a well-recognized source for exotic plugs and transplants. They wrote extensively, authoring a comprehensive set of books on the conifer nursery trade. Many of us have those plants growing on our farms.

On Saturday, we continue our tour of the Arboretum, examine trees, and discuss production and cultural practices. Bring your notebooks and questions, a camera and a sweater.

If you are a serious grower, intent on being a leader in growing exotics for Christmas tree and nursery trade, you don't want to miss this meeting. It is a rare opportunity to tour with Don. In the afternoon we have our annual ECA member meeting to discuss how to improve ECA and spread the word to potential new members. This is an important ECA business meeting. There are issues to discuss and new research to share.



A view of the Arboretum at Blue Hill. Blue Hill goes back to the mid 1800's when migrants came by stage coach and looked East to see blue sky above the hillside. This reference is found in old books and maps.

### FALL FIELD DAYS SCHEDULE

#### Friday, Sep. 29

- 12 Noon 'Meet & Greet' Lunch at the Arboretum
- 1:00-1:30 PM Introduction to the Arboretum w/Don Hilliker
- 1:30-5:30 PM Arboretum Tour
- 6:30 PM Saturday Night Dinner & Social at Mary's Fireside Inn, East Concord, NY

#### Saturday, Sep. 30

- 8:00-9:00 AM Registration, Coffee, Tea & Donuts
- 9:00-12 Noon Farm Tour, Discussion of Exotics
- 12-1:00 PM Box Lunch
- 1:00-2:00 PM Business Meeting
- 2:00-3:00 PM Wrap-up with Don Hilliker

# EXOTIC CONIFER ASSOCIATION

3006 Blue Green Drive  
Beavercreek, OH 45431  
matt.mongin@exoticconifer.com  
937-671-5443

The purpose of the Exotic Conifer Association and this newsletter is to gather information from growers about their experiences growing exotic conifers. It is essential ECA members participate. We ask growers of exotic conifers from all over the country and Canada to contact their Regional Directors with news from their farms. E-mail your experiences, good or bad, to your regional director, and share with all ECA members.

## REGIONAL DIRECTORS

Eastern Canada - Larry Downey  
downey.mp@sympatico.ca

Northeast - Jeff Taylor  
taylortreepeople@aol.com

Southeast - Darryl Bowersox  
dbab@ptd.net

Mid-South - Art Landrigan  
arcyacres@citlink.net

Midwest - Randy Caster  
hillcrest102@gmail.com

Upper Midwest - Mike Laine  
northmnnursery@gmail.com

West - Tom Leege  
tcleege@gmail.com

## ELECTED OFFICERS

Mike Laine, Pres.  
Northern Minnesota Nursery  
218-476-2162

Matt Mongin Sec. Tres.  
Spring Valley Tree Farm  
(937) 429-1717

## EDITOR AT DESK

Cynthia Curtis  
curtistreefarm@gmail.com  
908-387-1225

## Secretary's Notes by Matt Mongin

I am looking forward to meeting you at our Fall Field Days, Sep. 29 & 30 at the Arboretum on Blue Hill with Don Hilliker. We encourage everyone to join us for a delightful diner and social gathering on Sat. Night at 6:30 PM at Mary's Fireside Inn in East Concord NY.

Everything you need to know about Fall Field Days: addresses, travel directions, schedules, are in this issue but if you have a question, do email me at [monginmatt@gmail.com](mailto:monginmatt@gmail.com).

A little house-keeping. Everyone (current and past ECA members) should have received a Fall Field Days registration brochure in early August via U.S. Mail. You should have also received the August Newsletter with a listing of Buffalo, NY area hotels. If you have already sent in your 2017 ECA membership form and fee then all you have to do is fill out the Fall Field Days registration and send it in together with \$15.00 per person for the meals on Friday and Saturday noon. If you haven't sent in your membership form you can enclose that with your Fall Field Days registration. Please send that in by September 15th so we can have a good count for meals.

Now would be a great time to jot down some of those long unanswered questions you have about exotic conifer cultivation, seed, seedling and transplant sources, etc. With Don Hilliker, Larry Downey, Mike Laine and a host of others, no questions will go unanswered.

This would also be a good time to reflect on ECA, our Newsletter, and website so we can get the feedback we need to make this organization as helpful to the members as possible. We are always looking for interesting articles about your experience with exotics. See you soon ~

## President's Message by Mike Laine

Hello everyone, another summer is slipping by on us. It has cooled off up here in the northland with nighttime temps in the 40's. We had a good growing season here with only one dry spell the middle of July to the beginning of August with temps mostly in the eighties.

I attended two other meetings besides our state meeting. In July I attended the Michigan Christmas tree meeting. There was good attendance at their meeting with great field tours. One of the seminars discussed consumers reasons for choosing artificial over real trees and what it would take for them to switch to a real tree. The survey seemed to show that while they feel that real trees are better for the environment it wasn't enough of a factor for them to switch. The messiness of real trees was still the main factor in not buying them. But when asked what would make them change their mind, they said if their children put pressure to buy a real one they would make the switch. So I guess we need to focus our advertising on the young people.

Also, Dr. Bert Cregg from MSU gave a discussion on a possible breakthrough of deconing Fraser Fir with field results that look very promising. I will discuss it further at our meeting in Buffalo as it has not been published yet.

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## 2017 Late Spring Frost Again! by Matt Mongin comments by Rick Bates, Ph.D

**Professor of Horticulture, Penn State University**

In Southwest Ohio May 10th is the day you can stop worrying about a cold snap harming your Christmas trees. Well that is true most years but not last year and not this year. Two years in a row we had a late spring frost cold enough to significantly damage several species of the conifers we grow for Christmas trees. I hear many growers in Ohio, Indiana and Pennsylvania were also affected. Let's explore what happened and assess the resulting damage. Is this just bad luck? Will it happen again? What should we do?

We tend to focus on those first days of May and worry over a cold snap out of Canada. But the problem actually starts in March or perhaps a little earlier. The last two years we experienced a mild winter and an early and warm spring. Plants do not read our calendar. Rather they are sensitive to warm days above 45 degrees or so and as these accumulate the trees begin to awaken from their winter sleep. Once that process starts, they make steady progress toward bud-break and new growth. The new growth is tender and very vulnerable to a cold snap. Even 30 degrees F for a couple of hours in the night is enough to damage new foliage.

A better measure than the calendar of a trees readiness to break bud is growing degree days (GDD). GDD is a weather-based indicator for assessing crop development, and relies on heat accumulation to predict plant and pest development rates.. Ohio State University has an excellent web site (<https://www.oardc.ohio-state.edu/gdd/>) that tracks GDD and identifies the plants and insects that respond to it and when. For example, Douglas fir has an early bud break at about 200 GDD about the same as Snowdrift Crabapple. At about 215 expect to see some of the spruces break bud then scotch and white pine. Balsam, Concolor and Frasier follow by 230 GDD. Last of all, at least at our farm, are Canaan fir. Expect those to wait until 260 GDD or later. Unfortunately, those Mediterranean firs like Nordman and Turkish break bud early like Douglas. Keep in mind not all the trees of a particular species break bud on the same day or even during the same week. More about that diversity later.

Two damaging frosts in successive years is rare. No one I know can remember two in a row. More likely, once every four to five years. Because of that we keep planting the same trees. If we get a bad frost, we complain, shear the trees heavily and wait another year or two to sell them. Many, if not most, will turn around and make a tree. But two years in a row, to say nothing of three is devastating. The trees are stunted and likely lost together

with your investment of three to five or more years.

Let's revisit 2016 and 2017 with those successive warm winters and early, warm springs. Take a look at the accompanying chart. Note that in March 2013-2015 and even April remained cold enough that GDD did not exceed 100 until the second week in April. Note also that GDD did not exceed 400 in those years until the second full week in May. That is important because most conifers we grow for Christmas trees break bud about 200-260 GDD and new foliage does not elongate significantly until 400 GDD. Thus in 2013-2015 no frost damage in the spring.

	2013	2014	2015	2016	2017
1-Mar	27	9	6	39	97
7-Mar	27	10	6	43	105
14-Mar	38	26	13	96	111
21-Mar	40	34	30	120	113
28-Mar	40	40	36	157	155
4-Apr	45	66	56	184	188
11-Apr	123	93	112	193	188
18-Apr	189	147	181	250	324
25-Apr	219	193	207	331	400
2-May	292	246	244	397	488
9-May	378	334	386	439	507
16-May	457	442	486	504	597
23-May	603	522	572	563	719
30-May	710	667	731	722	845

Source: Ohio State University GDD website: <https://www.oardc.ohio-state.edu/gdd/>

Now, look at 2016 and 2017 on our chart. March was warm and April warmer particularly 2017. For most of our conifers, bud break GDD occurred by mid- April and that critical 400 GDD mark was achieved by the end of April. No wonder those cold nights on May 10th and May 14th caused the damage they did.

There are those that claim we are seeing a warming climate. A change not just an anomaly. Tree growers have to take the long view so let's say the forecasters are right and along with disappearing glaciers we can expect warmer late winters and earlier, warmer springs. Without turning to an unhealthy percentage of Canaan fir what other options are there to maintain a high percentage of high quality Christmas trees? If you stand back a minute it looks like we need trees from each of our favorite species that break but later. Perhaps 300 GDD instead of 220.

On my farm, right beside some awful looking blue green

*Late Spring Frost cont from pg 3*

Concolor fir that were heavily damaged in both 2016 and 2017 are some beautiful blue ones that have no frost damage. None. Same seed source, (Cibola), same nursery, and planted out of the same box on the same day. Some look awful, some look great. Go figure! The difference is genetic diversity. Not once but two years in a row these blue Concolors escaped damage. Looking around I find quite a few, maybe 20 percent of those Concolors I grow are fine. Hmm. That got me to looking at the other species on my farm and guess what? I have undamaged Norway. Serbian, White and Blue spruce beside the damaged ones.

The older trees seem to have less damage so size and maturity are factors to. All my Douglas are damaged but I don't grow very many. I suspect even some of those break bud later and thus may be more resistant to late spring frosts. *[Comment by Rick Bates: Seed source also affects bud break timing. For example, Douglas-fir from the Shuswap Lake region break bud about a week or more later than the Lincoln National Forest seed source, in PA.]*

Certainly the frost in 2016 and 2017 were not bad luck in early May. Is 2018 the next early warm Spring? Maybe and more than likely. So what do we do?

First, for starters when you order your trees for 2018, ask the nursery if they have some that break bud late. Tell them this is important to you. If enough growers ask, nurserymen will respond. But it will take time. *[Comment by Rick Bates: Might want to add something about site selection relative to spring frost; ie upland sites are obviously better than low frost pockets, and north facing slopes are better than south or southwest facing slopes. Site early-breaking species accordingly. ]*

How about those trees that break bud late on your farm or your neighbor's? Instead of selling those late bud break trees as soon as they are ready, keep them growing and plan on reproducing them.

A few growers doing this can make a big difference in just a few short years. This is a good project for regional tree associations to engage with our University researchers. Another approach may be hybrids. We know Canaan fir is resistant to late spring frosts because they break bud very late. Some we have on our farm don't break bud until nearly 300 GDD. What if we crossed those late breaking Canaan with our favorite Concolor or Balsam or Fraser? We know these native firs cross easily. Would we get a late bud break hybrid? Probably, at least some. In the meantime, seek out a GDD calculator for your State and or area. Many of the Agricultural Schools have them on line or could with a little encouragement. Make a chart like the one above and track Spring warmth. If you see 100 GDD by the end of March you know what to expect. Let's work on this more.



*Late Spring frost damage on Spruce*

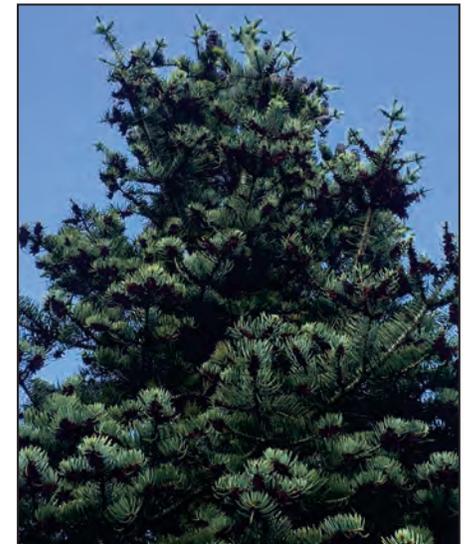


*Spring frost damage to Fir*

Check out the Exotic Conifer Association website [www.exoticconifer.com/](http://www.exoticconifer.com/) and

<http://ento.psu.edu/extension/christmas-trees/scouting-report/>

## Cones & Pollen



*First year Concolor Fir cones seen at All Western Evergreen Nursery and Christmas Tree Farm*

### *From Katherine Humphries:*

I believe the trees were planted in the 1980's. This particular tree is one that people see when they drive in our driveway at All Western Evergreen Nursery and Christmas Tree Farm at 6840 Liberty Pole Road.

There are more Concolor fir 25 to 35 feet tall that had pollen cones this year in our fields; however, the wet weather did not cooperate for us to be able to harvest much of the pollen.

In 2015, this particular tree had so much pollen that I collected some in a gallon freezer bag and put it in the freezer because I was so surprised and was thinking of how much Bill would have liked to see this tree, just as now he would so like to see the cones in the top of this tree, which to my knowledge is the first that we've had.

*cont on pg 10*

# Exotic Enterprise by Jeff & Sue Taylor

## Windswept Mountains View Christmas Tree Farm, Richmond, NH

As much as we would like to, we will not be able to attend this year's Annual Meeting. We are hosting the NH-VT Christmas Tree Association at our farm on September 23rd and as you know, you can never be 100% prepared, especially when your farm will be judged by other growers. We are expecting about 80 members and just finding enough room to park all those vehicles and vendors is a challenge in itself.

With regards to your questions about the trees I'm currently growing 18 species and crosses:

Cook's Balsam	Niko
Sheet Harbor Balsam	Balsam X Veitch Veitch (3 way cross from Itasca Greenhouse)
Fraser	King Boris
Fraser X Balsam (Fralsam)	Blue Korean
Korean X Balsam	Corkbark
Siberian	Grand Fir
Turkish	Nobel
Nordmann	Korean
Greek	

As you would probably guess the more popular species for my customer base by volume sold would be Fraser followed by the Fraser X Balsam. We have had a strong interest in Grand Fir, which I am currently out of mature trees but plenty more on the way. There is an increasing interest in Turkish and we sell more every year. Last year, we cut our first block of Korean X Balsam and of course every tree we had ready was sold. I have some more for this year, then we'll have to wait five to six years before the next crop is ready. Corkbark is always popular but we have issues with needle rust cytospera canker which limits the number of trees that

make it to harvest. Also they seem to do fine in the field for 3 or 4 years then their terminal growth gets stunted, the needles shorten and the tree usually does not return to normal growth.

Last year we harvested our first significant number of Siberian Fir (approx. 150) which I have had issues with regarding tree color, density, and again sporadic occurrences of cytospera canker. However, to my surprise, I received several positive comments from my customers after the sales season. Typically being a more open tree which I market as a "traditional tree" the customers ornaments could hang freely within the tree and the lights in the interior of the tree could be seen. Many customers like the scent, which is unique and quite strong.

The Sheet Harbor Balsam I purchased from Northern Minnesota Nursery were all harvested in 2015, some of which were 10 feet tall and very dense. I entered one in the NH-VT Associations growers contest, judged by the members, and took second place. I like the tree because you have several leader choices and never had to tie one up, but the branches are a little weak for heavy ornaments.

We cut a 9 foot Turkish Fir for the 1st week of November for a display tree for ornaments in our Christmas Barn. After the sea-

son we close the barn (the tree did not get watered after that) and in February, I brought that same tree as a display for the Forest and Farm Expo along with a fresh cut Siberian Fir. That Turkish was a lustrous, beautiful, shining green, the best color of all the other trees there at the Association's booth and you could not pull a needle off and they would bend as though it were recently cut. During the day that my wife and I manned the booth we had more positive comments on that Turkish and Siberian, probably because not many people had heard of those species, never mind being able to touch one. Many folks asked if we had more growing on the farm, which of course we do.

In closing I want to mention I have been very pleased with the Blue Korean Fir I purchased from Downey Nursery and planted in 2013. The trees average 4-5 ft. now and I have had very little trouble with maintaining straight leaders (just the opposite with straight Korean) and they are a beautiful blue-green color. I planted more this spring as they were again available from Downey.



Abies veitchii, Veitch Fir, from Japan to Richmond New Hampshire

## Recollections of Past ECA Tours by our intrepid members

**Katherine Humphrey from All Western Evergreen Nursery & Christmas Tree Farm in beautiful Springwater, NY**

What I remember about past year's Walking Tour of Don Hilliker's Blue Hill Arboretum with my daughter Jerrienne who currently runs our farm, is the unique way he had us enjoy his numerous species and different culturing techniques. We were handed several pages with numbers and explanations for the many stops we could walk to at our own pace. No one else needed to be with us and we could make notes on the page to ask Don afterwards. He and his volunteers provided us with wonderful food both before walking around and also afterwards. I will not spoil the fun here by telling you all the different species you will see, as well as such things as stump culture and other ideas to save you time and money. We at All Western Evergreen Farm have purchased tree seedlings and transplants from Don over the years. The most outstanding feature of his operation is that you always go away with a few extra species of trees you never heard of before that you can plant wherever you want on your farm. For example, I have a Dawn Redwood and four Montana Larch trees I know came from Don's place. These extra trees, like the ones we have purchased, have survived well on our farm. Interestingly enough, my husband William Humphrey, Jerrienne and I were on the Hilliker Blue Hill Farm in the early 1970's for a New York Christmas Tree Growers tour when the elder Hilliker, Don's father, was the tour leader. That was over 40 years ago when Jerrienne was very young and so were we! Much has changed since then and you will want to enjoy this unique setting for dozens of conifer species.

Don Hilliker and his wife worked hard on their farm. They published several books on how to grow trees. See <http://www.arboretumonthebluehill.org/Treaven%20nursery.pdf>. Actually, if you Google "Don Hilliker's books on growing conifer trees" you will find much information you can use.

One of the most outstanding Exotic Conifer meetings that I remember was held in the Pacific Northwest at Tom & Carolyn Leege's farm near Coeur d' Alene. I will never forget the beauty of Carolyn's baskets of exotic evergreens decorating the banquet tables, Carolyn's wonderful choice of delicious and healthy foods, and the tree farm tour where they planted several tree species in rows of just a few trees of each kind, so we could compare them easily.

Other ECA meetings I recall: having a great lesson on how to graft trees presented at Downey's in Canada; how to start a seed orchard presented in Colebrook, New Hamp-

shire at Wier's where we saw their boxed tree operation and how they were able to cope with being featured in the Wall Street Journal; having attendees share their talents by presenting when speakers were unable to attend because of 9/11 and seeing Bob Girardin place where we learned much more about considering micro-climates when planting the different species; Beck's Tree Farm near Bethel, PA (remember the Lehigh & Hudson caboose and how they put it atop the highest hill around) and the many wonderful marketing ideas (train theme) for exotics, and the culture of seedlings of many crosses between different species.

I remember the "round to it" wooden ornaments imprinted each year at a farm in Iowa that they gave away to their customers. The tour at each of the farms where they highlight their trees, equipment, and unique features leaves a lasting impression. We can take away an idea (usually more than one) that we can go home and adapt to our farm operation.

**Larry Downey of Downey Tree Farm & Nursery, Hatley, Quebec**

My experience at ECA started too many years ago. I met Bob Girardin, the founder of this Association back, when there was a meeting at Nashua NH during the winter. Bob did a presentation on exotics and we spent most of the meeting talking about different types of species. I was invited to go to these meetings and never stopped since.

I remember a meeting at Bob's farm before he sold it. We are a small group of growers and it was informal, no guest speaker, just Bob and a group of growers walking the fields, talking about the cons and pros of each species.

That is what I like about our Association. We all participate informally in these events. We share our passion for that special species and wish, as I do, that I lived in a warmer climate so that I could grow more.



Andrew Leslie, F&ES post-doctoral fellow in paleobotany at Yale, collecting pollen samples. Pollen has a sturdy, cuticular outer wall, called the exine, and a delicate cellulose inner wall, the intine. Both serve to protect the sperm nucleus. These structures "are

very resistant to most biological forms of attack," Leslie estimates that a medium-sized black pine can produce 10 billion pollen spores, mostly released over the course of a single week each year. The combination of abundance and durability has made pollen an important tool for understanding how plant communities change over long periods of time.

## Exotics: How I Got Started by Bob Girardin (edited)



### Background

People ask me how I became interested in growing exotic species for Christmas trees. This is my answer.

In the mid-1980's I read a publication titled Rhode Island Christmas Trees. My eye caught an article about Darrell Russ who is a forester at The Great Mt. Forest, in Norfolk CT, a 6500 acres forest that contained a variety of conifers native to different regions of the world.

I called Darrell and he told me about the exotic conifers that were in the forest. I realized these exotics were growing in a micro-climate similar to NH. He sent me some plant material. I could not believe how beautiful the foliage was, compared to what I was growing on my farm in Sanbornton NH. I visited the Great Mt. Forest and was impressed by the size and beauty of these conifers. I saw species like Nordmann Fir, Turkish Fir, Meyer Spruce, Pacific Silver Fir and many others.

### Time to Spread the Word

I decided I would try to grow some of these conifers in NH. But more important was that the growers of Christmas trees and ornamentals across the country know what I saw and I intended to spread the word. I asked Darrell for the names of growers who were growing exotic conifers. Some of the names he gave me were Don Hilliker, Guy Cockburn, Bill Sayward, Bill Humphrey and Les Corkum.

In 1990 I planted exotic transplants that I obtained from Glen Aldrich from Aldrich Berry Nursery in Mossyrock WA. These transplants were Pacific Silver Fir, Shasta fir, Grand fir, Turkish fir, Noble fir, Concolor fir, and Nordmann fir. That same year I called Don Hilliker in Elma NY. I told Don that I wanted to spread the word about these exotic conifers. Don said he knew a few growers were experimenting with these conifers. He suggested I should start a newsletter to bring the growers together.

### The Newsletter

I called Darrell and told him I would start a newsletter. He sent me the names and addresses of over 25 growers who were growing exotic conifers. In 1991 I wrote my first one-page newsletter which I called Exotic News. It was a complimentary issue that I sent to the 25+ names on my list. The newsletter, which was a questionnaire asked the grow-

ers the following: Farm Name & Location, Mailing Address, Phone Number, Elevation, Hardiness Zone, Species including seed source (if possible), Findings, Comments, Recommendations and if possible photos.

The response to the newsletter was lukewarm at first as these growers really did not know much about me but they thought my idea was a good one. The fall of that year I sent out another one-page newsletter that I was going to publish twice a year. One of the features of this newsletter was a list of suppliers of exotic conifers: seeds, seedlings, and plugs. In this fall issue, I talked about seed source and ornamentals.

As time went on, Exotics Conifer News (I renamed it) grew to six pages and was being read all over the US and Canada and in England & Scotland. I wrote a column called Exotic Update for Christmas Trees Magazine. Later on, I was also writing for Christmas Tree News. As the word spread, I was asked to speak at some National Christmas Tree Association annual summer meetings along with many State Association meetings. I took samples of exotic conifer foliage to these meetings for the growers to see their beauty.

### Interests Grows

As the interest grew I formed The Exotic Conifer Cooperative with the help from Darrell Russ, Jeff & Sue Taylor, John and Sarah Partyka. Each year our members and guests visited many early Exotic trial plantings across the country and Canada. One of our most memorable visits was at The Great Mt. Forest. The largest plantings of exotic conifers in the country are there.

Many growers began their own trial plantings to see which species did the best in their microclimate. Then they could go ahead and make large plantings. I was able to share the results with growers through my newsletter Exotic Conifer News in a section called Exotic Feedback.

### Exotic Conifer Association

I needed help if I was to continue being in charge of the Exotic Conifer Cooperative. Jeff & Sue Taylor and others, volunteered help. Very soon the Exotic Conifer Cooperative became the Exotic Conifer Association with its own website. The association holds an annual meeting at tree farms around the country and Canada, discusses matters important to growers and still publishes a newsletter.

### Willow Pond Farm

I made my first plantings of exotic conifers in Sanbornton NH in 1990. For the next 15 years, I planted over 60

## How To Make The Christmas Tree Promotion Board Work For You



The Christmas Tree Promotion Board (CTPB) is a national promotion and research organization funded by North American Christmas tree growers. The USDA authorizes the CTPB to manage an effective program of promotion, research, and information designed to

strengthen the Christmas tree industry's position in the marketplace. The USDA allows the CTPB to assess Christmas tree sales to fund its programs.

A 12 member board, consisting of Christmas tree producers from the east, central and west regions of the US, along with an importer member, decides how to spend the assessment to enhance the value and demand for cut Christmas trees and to create and increase opportunities for growers. Even if you are not assessed for trees, cut and sold, the CTPB can work for you.

The 2017 Campaign "It's Christmas Keep It Real," is underway. Register your e-mail address with CTPB by signing up on their website <http://www.christmastreepromotionboard.org/>. Then their Newsletter is delivered directly to your inbox. The Newsletter, published at least twice each month, is loaded with information about promotional opportunities.

79% of online adults (68% of all Americans) use Facebook Source: Pew Research Center	
All online adults	79%
Men, & Women	75, & 83
18-29	88
30-49	84
50-64	72
65+	62
High school degree or less	77
Some college	82
College+	79
Less than \$30K/year	84
\$30K-\$49,999	80
\$50K-\$74,999	75
\$75,000+	77
Urban, Suburban, & Rural	81, 77, & 81

Down load their professionally designed graphics and signage. Be sure to view the 16-minute training video on how to use Facebook. It is all free and easy to use.

Marketing research shows that a real tree is selected over an artificial tree very often to please children, who want a real tree. Consumer research indi-

cates that 80% of those who had an artificial tree grew up with an artificial tree. CTPB's goal is to target families with promotions that develop and a build a long-term demand for Christmas trees with a younger generation, and reverse the trend.

The Facebook audience in the United States totaled 214 million users in 2016. Over 91 million are adults between the age 25 to 44, the exact age of the target audience. The goal of the CTPB's consumer advertising campaign is to build long-term demand with adults born between 1965 - 1976 and families with children at home.

If you are serious about growing your business use Facebook. Luckily, Facebook is free and simple to use. Anyone, even YOU, can make a page for your farm. Include your name and address and contact information and a photo or two. But there is no reason to stop at there.

Thanks to the CTPB the most difficult thing about having a Facebook page, creating content to post to it, is taken care of a professional team called SPROUT. Every time the campaign shares a post on the "It's Christmas Keep It Real" Facebook page, <https://www.facebook.com/ItsChristmasKeepItReal/>. SPROUT will simultaneously share that post on the Facebook pages of all growers who chose to take part in the program. The result is thousands of farms across the country sharing attractive, fun, value-building campaign messages all at the same time.

It will look like you are posting fun, campaign related content yourself. You will have interesting, engaging and ever-changing content, all through the season, without a worry. If you are not active on social media, then it will help you start. If you are already active, then this will complement your existing posts.

Last year's social media campaign had outstanding results.

- 4,404,747 people saw the campaign online.
- 1,869,989 people liked, commented, shared, or tweeted about it.
- 1,031,435 viewed CTPB's professionally produced YouTube videos

CTPB benefits the industry in many ways. CTPB solidified its commitment to Christmas tree research by allocating \$120,000 of 2016/2017 budget to industry research initiatives. They are funding five research projects involving researchers who are well-known in the Christmas tree industry and include all growing regions. Of special interest is a project called Regional Adaptability of Turkish and Trojan Firs that involves six universities.

That is how you make and make the Christmas Tree Promotion Board work for you.

*Exotics: How I Got Started cont from pg 7*

different exotic species including many hybrids. During that time I had growers from all over the world visit my farm to see all the exotic plantings. Willow Pond Farm was featured on local television, world radio and many publications. At Christmas time I was selling over 10 different species of exotic conifers.

**Research**

Over the many years of growing exotic conifers, I conducted extensive research. This research looked at the rate of growth, foliage, needle retention and insect & disease resistance, response to my different micro-climates, response to different shearing techniques and deer damage. I shared the results of this research with the readers of Exotic Conifer News and in many other publications and at presentations at State & National Christmas tree association meetings.

**The Future Looks Bright**

Interest in exotic conifers for Christmas trees and ornamentals is thriving. Growers are finding the public appreciates the beauty of these conifers. They are an important part of Christmas tree and ornamental plantings. Some of these exotic species are winning ribbons including Grand Champion at Christmas tree competitions.

In 2013, The Wall St. Journal ran a full-page article titled Hardy Firs, With Special Effects, for Christmas by Anne Marie Chaker. The article emphasized the need for diversity of Christmas tree species. The article mentioned three exotic species, Turkish, Nordmann, and Korean Fir. Years later I wrote an article for the Journal entitled “Exotics: The Future is now.” It is really exciting to see it happening, thanks all the growers who believed in exotic conifers.

**The Original Pioneers**

I would be remiss if I did not mention some of the Christmas tree growers who envisioned exotics as Christmas trees and they were way ahead of their time. These were the Les Corkum, Don Hilliker, Ken Franke and the late Claude Heit, Guy Cockburn, Bill Humphrey and Darrell Russ. Thank you

I want to give special thanks to:

- The late Darrell Russ who was one of my mentors, for exposing me to the beauty of exotic conifers. My other mentor is Les Corkum, like Darrell he showed me the beauty and potential of these exotic conifers as Christmas trees. There are also many others who encouraged me along the way.
- Larry Downey for spreading the word about exotic conifers by giving presentations at State and National Christmas tree meetings when I was unable to attend.
- Bill Sayward of Itasca Greenhouse in Cohasset, MN who had the foresight to see the need for growing exotic conifers for Christmas tree growers.
- Chuck Wright and Catherine Howard for giving me opportunity to spread the word about exotic conifers in their publication Christmas Trees magazine.

**Darrell’s Future Winner**

Darrell Russ mentioned many exotic conifers that had the potential as a Christmas tree. One spruce that was native to China; it was *Picea meyeri* (Meyer spruce). He felt it was a winner. It exhibited beautiful bluish foliage with strong branches and had excellent needle retention.

I located some Meyers Spruce plugs from Bill Sayward. These plugs grew beautifully on different micro-climates on my farm. I have written

many articles on Meyer spruce telling growers of my success with this spruce and how popular it was with customers. Many growers across the country and Canada have success growing this species.



12-year old Emma Nicholson from Hidden Pond Tree Farm takes 1st Place with Meyers Spruce Table Top at NJCTGA annual contest



*Picea meyeri* (Meyer spruce) of Chinese origin, Pyramidal shape with fairly dense habit. Blue needles, 13–25 mm long, on ascending branches.

*Cones and Pollen cont from pg 4*

When people come the end of September to Don Hilliker's, if they would like to come here to see the trees, they are certainly welcome then or anytime they wish to arrange a time. I always enjoy giving tours of our farm. The trees on our farm that are sheared are all hand-sheared since 2008, and that may be unique since many use mechanical devices.

Dean Swift of Dean Swift Seed Company in Alamosa, CO was a friend of Katherine's late husband Bill. He may have provided the seed for this tree. These are his comments regarding the tree. "The tree in the photo is definitely not "Swift's Silver". The needles are too short, the growth slow, the needles too much curved up, and the cones are the wrong color. If I had to guess, looking at the photo, I would say that this tree is either Rio Grande or San Juan. It is definitely not Apache or Lincoln. It is either southern CO or far northern NM.

***From Matt Mongin***

As you know I collected Korean pollen in early April (240 GDD) and then used it to hand pollinate Canaan fir cones in mid-April (372 GDD). We hand pollinated using either a puffer or a spray bottle (with the pollen fresh mixed with distilled water) about 1,000 cones growing on about 25 Canaan fir trees.

We were careful to refrigerate the pollen to maintain its viability and to apply it to what we believed were cones in a receptive state. That is, when the scales were nearly horizontal and you could look into the core of the cone.

Fast forward now to the middle of August (2600 GDD) and I was surprised to see the cones were dry and starting to open. We probably should have begun harvesting the cones a week or two earlier, say at 2400 GDD when we could have snapped them off the branches without them breaking up.

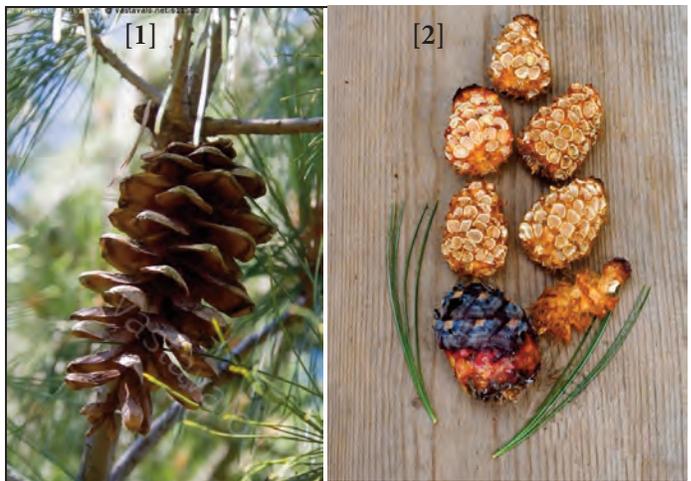
This has been a warm year and we should have expected the cones to ripen early. It was no problem just snipping them off the branches with a pair of hand shears.

The cones were full of seeds, maybe 100 or more per cone. I'll do some actual counting in a day or so to get an average. The bad news is that none of the seeds appear to be viable. The seeds are flat, not well developed, brown and hard. It appears they were not pollinated. We sampled five or six trees and the story is the same regardless of how the pollen was applied - dry or wet.

I am thinking about why? Maybe:

1. the pollen was not viable
2. we should not have used surfactant to help stick the pollen to the cone scales
3. mixing pollen with water, as a carrier, does not work well
4. the cones were really not receptive at that point
5. our pollinators were not careful enough

We will check some more trees to be sure these results are consistent and spend a few days reexamining our processes. We know controlled pollination works as others (a few) are doing it successfully. We will try again next year. Perhaps we will be a little smarter. I am open to any suggestion or observations you may have.



[1] Seeds ready to harvest, cone in receptive state. The scales nearly horizontal. You can look into the core of the cone. [2] Cones with 100's of seeds. Can anyone identify the conifer? Hint: most likely grows in Finland.

**LODGING RECOMMENDATIONS** near Arboretum on Blue Hill, 10745 Hilliker Road, Delevan NY

Rentals are available on the Arboretum property. Phone (716) 652 4206 for more information.

**Motels near Arboretum on Blue Hill**

Microtel Inn and Suites	716-592-3141
Chaffee Lodge	716 496-5057

There are many hotels and motels available nearby. Reserve a room near I-90 and drive to the Arboretum

**DIRECTIONS TO MARY'S FIRESIDE INN** – 12133 Vaughn St., East, Concord NY - 716-592-9979

From Buffalo-Pittsburg HWY 219  
 Take Genesee Road East to Hwy 240 in East Concord  
 Turn right onto Hwy 240 and go 1/2 mile and Mary's Fireside Inn will be on your left.

## Shearing Korean Fir by Mike Laine



Korean Fir picture shows new buds below where the terminal was cut this year.

You ask anyone that has tried to grow Korean fir what they think of the species and they will tell you that they can't make a good top on them.

A couple years ago Larry Downey and Bob White experimented with the timing of shearing Korean fir and they discovered that by shearing them before the new growth had hardened they seemed to respond better. This spring I had a Korean fir with a 22" leader.

The reason the leader was so long was that the laterals around the terminal bud had all aborted so it pushed more energy for the terminal bud to grow, hence the nearly 2' leader. There were over 40 buds on this long leader.

So instead of cutting the long leader halfway I left it to grow its new terminal bud out. After it had grown out approximately 4" I trimmed it back right above a couple buds that were forming and at

the same time, eliminated the lateral buds around the new terminal leader.

If I would have left them the tree would have put more energy to the new lateral buds rather than the intermediate buds from the previous year. I will also thin out some of the forty buds on the stem to speed up their growth.

I came back to the tree couple weeks later to see results and was surprised to see how much the terminal had elongated after it had been cut back. There also seemed that a couple more buds had formed. The new buds had grown considerably and were all pointing upward which is a good

sign that at least one of them will form a leader.



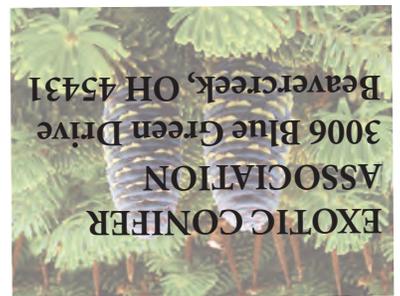
Growth of last years intermediate buds.

I sheared around 50 more Koreans in the same manner and will give my results next spring.

As a result of how trees respond with more terminal growth when their laterals are lost, I am eliminating lateral buds on my Meyer spruce and other firs that have a short leader from the year before. By doing this more energy is going to terminal and should increase its length.



Same Korean Fir this spring before bud break. This tree had a 22 inch leader



FALL FIELD DAYS at  
THE ARBORETUM ON THE BLUE HILL  
with DON HILLIKER

Friday September 29th & Saturday September 30th

GPS: 10745 Hilliker Rd. Delevan NY 14042  
42°28'14.0"N 78°34'11.2"W

The Arboretum on the Blue Hill grows conifers such as cedar, firs, larches, pines, spruces, christmas trees and some other assorted trees. They also have buildings for rent for a relaxing getaway in the "Enchanted Mountains" of Cattaraugus County.

They are located on the northern edge of Cattaraugus County, in the Town of Yorkshire: five miles east of Springville, NY, 6 miles west of Arcade, NY, and about 17 miles from Ellicottville, NY.

**Driving directions** to the Arboretum on Blue Hill are a bit complicated. We suggest you use your GPS and you should be fine. If you do not have GPS check out the Arboretum on Blue Hill website : [www.arboretumonthebluehill.org](http://www.arboretumonthebluehill.org) and print out a copy of Don's recommended driving directions or call (718) 652-4206