2017 Mail Order Conifer Price List

Sizes

Grafted Cultivar Trees - Our grafted conifers are grown in bottomless tree band pots (to prevent root spiraling), they are grafted on to the seedling stock trees in the winter (Feb.-March) and held for one to three full growing season before selling and shipping. They are well established in bottomless pots approximately, and are 6"-10" tall depending on species. We offer 3 sizes on some species. **Check for availability below.**

Small Tree Bands-3 1/2" square by 4 1/4" deep tree bands 650 ml. in vol. (One yr. old grafts) \$25.00 ea. Large Tree Bands-3 5/8" square by 6" deep tree bands 1000 ml. in vol. (One and Two yr. old grafts) \$30.00 ea.

One gallon sized pots (.742 of a gallon in vol.)-Two to three year old grafts. \$40.00 ea.

Shipping Conifers- We can ship conifers in the early spring (mid-March to the end April) before they break bud and in the fall after needle elongation stops and bud set occurs (mid Sept. till mid Oct) before it gets too cold here in Colorado. You can either email me your order at Kfieseler@gmail.com or send it by mail to Laporte Ave. Nursery, 1950 Laporte Ave. Ft. Collins CO 80521. Either way I need a check for the total plus 25% for shipping before I will send out your order. For large orders, more than 10 plants I will just bill you for the shipping, after I have received a check for the plants.

Shipping cost-- 25% of order, with a minimum of \$20.00, send a check (we don't take credit cards) to Laporte Ave. Nursery, at 1950 Laporte Ave. Ft. Collins, CO. 80521. We ship our conifers on Mondays, by UPS or FedEx by ground only, and they should arrive by the end of the week.

Nursery Sales- We don't have regular hours for nursery sales but if you call me Kirk Fieseler at cell 970- 682-5848, we can arrange a visit or plant pickup. Some of these conifers are available in larger sizes 2 gal.-7gal.at the nursery only, but are too big to ship long distances.

Availability List as of 9/13/2016 for Conifers from the Rocky Mountains and Conifers not native to the Rocky Mountains.

The Rocky Mtn. Native Conifers

The True Firs (Abies) and Douglas Firs (Pseudotsuga)

Culture: All of these plants like a cool, regularly irrigated situation, eastern exposures are ideal. Deep soil amending is needed. Avoid highly compacted dry soils.

Hardiness: Zones 3-6

Abies concolor 'Archers Dwarf' Old selection, narrow shape, tight growth. Growth rate: 2-3"/year Not Available

Abies concolor 'Charming Chub' Jerry Morris introduction. Named for "Chub" Harper, a great connoisseur and authority on conifers, who passed away in 2009. Found in northern New Mexico as a broom in 1996. Tight growth and good blue color, gradually attains a pyramidal shape. Not only is it charmingly cute but it's a joy to pet its rubbery soft blue foliage, the perfect rock garden plant. Growth rate: 1-2"/year

Large Tree Bands

Abies concolor 'King's Gap' Dwarf plant with stout growth, numerous buds and thick dark blue foliage.

Seems to be very vigorous. DBG has a plant. Origin? Growth rate: 2-3"/year Large tree bands

Pseudotsuga menziesii 'Chubby Hubby'. A Jerry Morris introduction, collected from a dwarf tree.

Tight growth habit, with blueish foliage, develops into a small pyramid. **Growth rate:** 3-6"/year **Small Tree**

Bands

Pseudotsuga menziesii 'Eagle River'. Jerry Morris broom introduction, found by the town of Edwards near the Arrowhead golf course, has good green color and a pyramidal growth habit. **Growth rate**: 1-4"/year.

Small Tree Bands

Pseudotsuga menziesii 'Elt'. A J. M. tree selection, found growing in Cherokee Park, north of Ft. Collins. Original plant was 8' wide and 5' tall, with dark green thick needles and very tight bud internodes. With age plant forms a tight green ball. **Growth rate**: 1-4"/year. **Small Tree Bands**

Pseudotsuga menziesii 'Vail'. Jerry Morris broom introduction, collected from a tree growing on the western end of Vail valley, good blue color and a vertical shape.

Growth rate: 1-4"/year. **Small Tree Bands**

Pseudotsuga menziesii 'Weeping Willy' A J.M. selection from a weeping tree,

has a vigorous weeping growth habit with blue-green foliage. Growth rate: 3-8"/year.

Small Tree Bands and 1 gal pots

The Blue Spruces (*Picea*)

Culture: Very hardy, easily grown plants. Tolerant of poor, compacted soils, but not particularly xeric, so

moderate supplemental watering is needed most years in the west.

Hardiness: Zones 2-6

Picea pungens 'Corbet' Very tight pyramidal shape, stiff blue-gray needles. Growth Rate: 4"/year. **Not**

available

Picea pungens 'Haley's Blue', a Jerry Morris broom introduction. From a very good tight, blue broom

found growing in a tree on south Weston Pass road.

Growth rate: 2-4"/year **Not Available**

Picea pungens 'Marble', Jerry Morris broom introduction. Found near Marble, CO, in 1986. This broom

was growing high in the tree and required a rifle to shoot down scion material. Very sharp needles and a blue-

green turquoise color. Globe shaped. **Growth rate:** 1-3"/year **Large tree bands**

Picea pungens 'Montgomery' Original scion wood was selected in 1949 from a tree growing in the New

York Botanic Gardens. Plant has good blue color, and is a vigorous grower, can be kept in a rounded globose

shape if not allowed to set a leader, will develop into a tight pyramid if top is not trimmed out. Plants going by

the name P. pungens 'Globosa' are probably this plant. Growth rate: 3-6"/ year. 1 gal. pots

Picea pungens 'Saint Mary's Broom'. Develops into a rounded mound, very slow growing, good blue

color. Also known as St. Mary's Spruce. Growth rate: 1-2" year. Not available

The Pines (*Pinus*)

Culture: Most of the pines are drought tolerant and do well with little additional irrigation once established.

They are intolerant of compacted, heavy clay soils so great effort should be directed at soil improvement

(mainly ripping the soil deeply with the addition of compost) or placement on a berm or raised area that has not

been compacted.

Hardiness: Zones 3-6

Pinus aristata, Bristlecone Pine

This species is the most ornamental of all the western conifers because of its deep, blue-green color, long retention of needles, and its irregular growth habit. Each individual plant seems to develop into its own characteristic shape that reminds me of a living sculpture. These highly prized conifers grow very slowly both in the wild and under cultivation. Quite xeric once established. **Growth rate**: 4-6"/year.

Pinus aristata 'Blue Bear'. A Laporte Ave. Nursery seedling selection about 25 years old. This tree is extremely thickly branched, with a blueish green coloring that is quite different from the normal green of most Bristlecones. A very healthy plant that maintains vigorous upright growth after grafting. Growth rate: 4-6"/year.

Large Tree bands only

Pinus contorta Lodgepole Pine

A common pine found growing throughout the western mountains in the subalpine zones, grow fast and straight, used by Native Americans for tepee poles.

Pinus contorta 'Taylor's Sunburst', A Alan Taylor mid 80's introduction, new growth is yellow in the spring when first formed, gradually turns green as it matures. Forms a upright rounded form as the years past. Fairly fast growing. **Growth rate**: 4-8"/year **Large Tree Bands**

Pinus edulis, Pinyon Pine

Pinyons are probably the most xeric of all the western pines. They grow amongst the very drought tolerant western junipers. We in the west have used them widely in our landscapes mainly transplanting them from the wild into our residential gardens and public parks. In the urban landscape their biggest problem is over irrigation, but properly sited they are long lived and usually stay under 20 feet tall and 15 feet wide. **Growth rate**: 2-8"/year

Pinus edulis 'Farmy', Jerry Morris introduction, collected from a broom in 1988. This tree was growing on the Uncompangre Plateau in western Colorado. Very slow growing, plant develops a wide body look, as tall

as it is wide. Another perfect plant for the small xeric yard with a berm or a rock garden. **Growth rate**: 1-3"/year. **Small tree Bands and Large Tree Bands**

Pinus edulis 'Lil Jake'. A J.M. selection from a large broom 10' up in a tree growing south of Canyon City, CO. This plant has tight growth and bright green (the greenest of the Pinyons) needles. Growth rate: 1-3"/year. Small tree bands and Large Tree Bands

Pinus edulis 'Penasco' A J.M. selection collected from a broom east of the town of Penasco N.M. Short bright green needles, grows about 3-4 inches per year. Seems to develop an upright irregular shape. **Growth** rate: 3-6"/year Small tree bands and Large Tree Bands

Pinus edulis 'Tiny Pout' Another J. Morris broom selection found south of Cucharus Pass near La Veta, CO. Forms a tight pyramidal shape, bright green color. Growth rate: 2-3"/year Small tree bands and Large Tree Bands

Pinus edulis 'Tiny Rations'. A Jerry Morris selection from a broom found growing in a tree near Buena Vista CO. Good clean green color and very tight growth habit. Growth rate: 1-2"/year Small tree bands and Large Tree Bands

Pinus edulis 'Trinidad'. Jerry Morris introduction from a very large broom growing in a tree just south of Trinidad, CO. Very similar to 'Farmy' in shape but growth rate is a little slower, needle color is also a little darker green, more on the blue side. My personal favorite of the P. edulis so far. **Growth rate**: 1-2"/year

Pinus flexilis, Limber Pine

Small tree bands and Large Tree Bands

Limbers grow all through the four lower life zones of Colorado (Plains 3000-5000 feet, Foothills 5000-7000 feet, Montane 7000-9500 feet, and the Subalpine 9500-11500 feet), with the greatest populations in the subalpine zone. This demonstrates they are adaptable to various soils and growing conditions. I've made use of this observation and found they make great rootstocks for the five-needle pine selections from back east (Eastern White Pine, *P. strobus*) and Eurasia (Swiss stone Pine, *P. cembra and Lacebark Pine, P. bungeana*). The species itself can be quite vigorous if the seed is collected in fast growing montane forests, but if collected

from the higher subalpine populations yearly growth is greatly reduced. Limbers in the landscape age and grow somewhat irregularly often developing multistems with narrow pyramidal shapes. **Growth rate**: 1-18"/year depending on seed source.

Pinus flexilis 'Antero' A J.M. broom, produces lots of buds, looks good. Originally collected from an old large broom near Mt. Antero in central CO. Growth rate: 2-3"/year Small tree bands

Pinus flexilis 'Blackfoot' A J.M. broom, dark green needles have a slight twist, has a low spreading shape.

Growth rate: 2-3"/year **Small tree bands and Large Tree Bands**

Pinus flexilis 'B-Mine' A J.M. broom, nice dwarf, dark green color, collected near Pearl CO.. Growth rate: 2-3"/year Small tree Bands

Pinus flexilis 'Cherokee' A J. M. broom selection from an area in Cherokee Park which is northwest of Ft. Collins. I think this plant has the best blue needle color, and a very tight growth habit with lots of buds. **Growth rate**: 1-3"/yr. Small tree bands and Large Tree Bands

Pinus flexilis 'Commanche' A J.M. broom selection collected near the Vedauwoo area in Wyoming.

Good thick growth with excellent vigor, blue green color, similar to P. flexilis 'NiceIam'. Growth rate: 1-3"

/year. Large Tree Bands and 1gal pots

Pinus flexilis 'Damfino'. Jerry Morris introduction. This was the first limber that Jerry selected in the late 60's from a broom found growing in a tree near a creek called Damfino close to the Colorado-Wyoming border. The plant has dark green needles and an upright shape. A true miniature bun. **Growth rate**: 1"/year.

Small tree bands, Large Tree Bands, and 1 gal pots

Pinus flexilis 'Ginger Quill'. Jerry Morris introduction from a broom, develops into a very round almost pincushion shape. Growth rate: 2"/year Small tree bands

Pinus flexilis 'Granby' The smallest of Jerry's broom selections that I grow. **Growth rate**: 1"/year **Small** tree bands

Pinus flexilis 'Joy Morgan'. A Jerry Morris selection from a 2'x 2' tight broom found growing in a tree about 8' up on Squaw Pass which is west of Evergreen CO. The plant has green needles which have a twisting growth habit. **Growth rate:** 1-3"/year

Small tree bands

Pinus flexilis 'Kinzie Rose'. Jerry Morris introduction. Very soft needles that have a color on the blue side, collected near Bryce Canyon, in Utah. Growth rate: 2"/year. Small & Large tree bands, and 1 gal. pots

Pinus flexilis 'NiceIam' A J.M. broom selection from Red Canyon, Utah. Has good vigor, and an excellent silver blue needle color, expect an upright globe shape. Growth rate: 2-4"/year Small tree bands, Large Tree Bands

Pinus flexilis 'Saunny' A J. M. selection from a dwarf tree, very compact growth, colorful green foliage.

Growth rate: 1-3"/year **Small tree bands**

Pinus flexilis 'Waldorf' Jerry Morris introduction. Needles are blueish green similar to Cherokee.

Collected near the town of Waldorf CO. Growth rate: 2"/year Small tree bands

Pinus monophylla Single Needle Pinyon

This species of Pinyon is the western brother of P. edulis and is found growing primarily in Nevada with smaller population in New Mexico, Arizona, Idaho, and California. The big differences from *P. edulis* are its two needles tend to stick together (hence 'monophylla' or single needle) and its strikingly blue foliage color, cold tolerance has been good at least in Fort Collins to -20 degrees below 0 F.. This species is probably more xeric and heat tolerant than P. edulis in that it grows in the Great Basin where average moisture levels are lower and average temperature are higher compared to the areas where P. edulis grows. **Growth rate**: 2-6"/year. *Pinus monophylla* 'Blue Jazz'. A Jerry Morris broom introduction. Has an intense blue color and develops into a tight ball shape with age. Scion wood was collected from a ten foot high 14"x14" broom in a

tree growing along a highway in N.E. Nevada near Ely. **Growth rate:** 1-2"/year **Small and Large tree bands** and 1 gal pots

Pinus monophylla 'City Park Blue'. Slight name change from City Park Nine. A Laporte Avenue

Nursery introduction that was selected from a tree growing on a golf course across from Laporte Ave. Nursery.

The original tree has bright blue needle color, a conical shape, and vigorous growth habit. Growth rate: 26"/year Small and Large tree bands and 1 gal pots

Pinus monophylla 'Eureka'. A Jerry Morris broom selection collected near Eureka, Nevada. This plant has a grey green needle color and a very tight growth habit. Growth rate: 1-2"/year Small and Large tree bands and 1 gal pots

Pinus monophylla 'Curly Blue'. A name change from Nevada North. A standard grower, from DBG, very full and tight. Needles have a slight inward twist, fast growth habit. Growth rate: 3-6"/year Small and Large tree bands and 1 gal pots

Pinus monophylla 'Tiny Taylor'. A Jerry Morris selection that was past on to me by Alan Taylor. Good tight growth habit, grey green color. Growth rate: 1-2"/year Small and Large tree bands, 1 gal pots

Pinus monophylla 'Whoopy'. A Jerry Morris broom selection collected near Wheeler Peak in eastern

Nevada. Needles are unusually thick and blueish green in color. Also spelled 'Whoopie'. Growth rate: 1-2"/year Large tree bands, 1 gal pots

Pinus monophylla 'Xeric Blue' A Laporte Ave. Nursery introduction that has exceptional blue needles and a vigorous growth habit with a narrow upright shape. This is a standard grower. Growth rate: 3-6"/year Small and Large tree bands and 1 gal pots

Pinus ponderosa, Ponderosa pine

Ponderosa pines are the giants of our forests that have limited use in the harsh commercial urban landscape.

Austrian pines (*Pinus nigra*) generally have a similar form and perform much better in shopping center parking lots or over watered parks and golf courses. Ponderosa pines can succeed but great attention must be paid to

siting these trees in non-compacted soils. They look very natural when limbed up high, so they are great to plant in close to a deck or patio to produce an overhead canopy. **Growth rate**: 6-12"/year.

Pinus ponderosa 'Gumdrop' A Laporte Ave. Nursery introduction that has a low mounding shape like a gumdrop. Growth rate: 3-6"/year. Large tree bands

Pinus ponderosa 'Hiwan' A J.M. selection from a tree growing on the Hiwan golf course in Evergreen CO, grows about half the speed of a regular ponderosa, new growth, both the needles and stems, is very thick and green. Kind of reminds me of a tree on steroids. **Growth rate**: 4-8"/year. **Not Available**

Pinus ponderosa 'Little Joe' A Laporte Avenue Nursery selection from a broom found in a tree near Horsetooth reservoir, tight dark green needles, very compact growth, broom has a low mounded shape. **Growth rate**: 1-4"/year. **Not Available**

Pinus ponderosa 'Mary Ann Heacock'. A genetic dwarf plant, original tree is probably around 200 years old. Of all the native conifers I've propagated, this is my current favorite with the most ornamental potential from a nurseryman's point of view. I've been grafting it on both Ponderosa pine and Austrian pine root stocks with equal success. Original plant was found growing near Cherokee Park (N.W. of Fort Collins) in the early 1950's by Mary Ann Heacock and a group of bonsai enthusiasts. They recognized this plant as a genetic dwarf and quickly transplanted it to M.A. Heacock's garden in Denver. There it stayed until the late 1990's when Kelly Grummons (an avid horticulturist) transplanted it again to his garden in west Denver. Today it stands six feet tall and puts out two inch sprouts of tight congested growth, its needles are about half the length of normal Ponderosa pines. Kelly says that it really hasn't increased in size much since it was collected from the wild. As a grafted plant it puts out four inches of growth a year, has good dark green color, a bold chunky texture, and an irregular globe shape. I suspect its growth rate will slow down as it ages in the landscape. Growth rate: 2-4"/year. Large Tree bands and 1gal. pots

Pinus ponderosa 'Marguerite' A J.M. selection from a dwarf tree growing in the Vedawoo WY area, very tight and special. Also spelled 'Margarette'. DBG has a nice specimen. Growth rate: 2-6"/year. Large Tree bands only

Pinus ponderosa 'Pennock Pass Pincushion' A seedling selected from seed collected on Pennock Pass which is about 35 miles due west of Ft. Collins, this plant has especially tight growth that is well balanced throughout the plant giving it a pincushion look, very dwarf with fresh bright green foliage. **Growth rate**: 1-2"/year. Large Tree bands only

Pinus ponderosa 'Tasha' A J.M. selection, from a broom, soft needles, has a special look, from the Vedawoo WY area. Growth rate: 2-4"/year. Not Available

Pinus strobiformis, Southwestern White Pine

Very similar to its eastern cousin *Pinus strobus* in form and delicate needle texture, but much a superior landscape plant. Eastern whites seldom perform well here, they get severely chlorotic in our alkaline clay soil. Southwestern white pines are found growing natively in the southwest mountains of New Mexico and the southeast mountains of Arizona. I've grown to appreciate this plants fast growth rate, outstanding finely textured dark green needles, and excellent drought tolerance second only to Pinyons and Junipers in my opinion. Under irrigation this plant can put out two to three feet of growth annually. Without irrigation, six to eight inches is the usual rate, so keep it out of the lawn if you want a slower growing plant, another great addition to the xeric landscape or garden. **Growth rate**: 6-36"/year.

Pinus strobiformis 'Coronado'. A Jerry Morris broom selection. Collected from the Coronado Foerest in eastern Arizona. Has a irregular or contorted growth habit, a vigorous grower which puts out 12" of growth and then leans one way or another, Jerry calls it a leaner similar to P. banksiana 'Uncle Fogy'. **Growth rate**: 6-12"/year.

Small tree bands

Pinus strobiformis 'Loma Linda' A J.M. broom selection collected from a ranch near LaJunta Canyon.

Develops into a tight bun, has extremely short needles for this species, looks more like a Limber pine, except that its needles have the characteristic fine texture of P.strobiformis. Growth rate: 2-3"/year. Not available this year

Juniperus

The **Junipers** are the most xeric of the conifers, due to their deep water searching root systems and reduced scaly foliage. They are well adapted for hot sunny exposures and dry soils with poor structure and fertility. *Juniperus scopulorum* 'Woodward' Originally found growing in the eastern area of this species range, near the town of Woodward OK (Could be a hybrid with J. virginiana Eastern Redcedar). Has a single stem and a very columnar growth habit, stays within a 5'diameter after 20 years, the prefect tall hedge plant for a tight area. Plant on 3-5' centers. Color is on the blue side. **Growth rate**: 6-12"/year. **Not Available**

Conifers not native to the Rocky Mtns.

Cedrus libani subsp. stenocoma Cedar of Lebanon A cold hardy seed strain that has done well in my garden. Has a pyramidal shape, tips of branches bend downward giving it a graceful look, needles are stiff and dark green. Should be drought tolerant. Growth rate: 6-18"/year. Large Tree Bands and 1 gal pots.

Pinus banksiana, Jack Pine

A very common native of northern forests of the United States and Canada, it can be found south into Minnesota, Michigan, New York, and north to the Alaskan and Canadian tundra. Very closely related to the Lodgepole Pine, native to the western mountains of North America. Usually develops into a scrubby pine that Lacks lower branches with an irregular crown. A tough pioneer species that has that tortured look that only a bonsai enthusiast could love.

Pinus banksiana,'Angel' Jack Pine A J.M. selection that has a upright contorted growth habit, with light green needles, and elongated white colored buds. **Growth rate**: 3-6"/year. **Small tree bands and Large Tree**Bands

Pinus cembra, Swiss Stone Pine This pine is native to the central European Alps, northern Asia, and northeast Russia, hardy to zones 3 to 7. It is slow growing with a compact stout branching habit, developing into a tight conical shape. Needle color is a dark green. Needs excellent soil drainage, and at least 20" of moisture through the year. A great plant for the smaller landscape.

Pinus cembra, 'Chalet' Swiss Stone Pine Has a narrow upright growth habit, grafted on our native Limber Pine. Growth rate: 3-6"/year. 1 gal pots

Pinus densiflora Japanese Red Pine

Very hardy (drought and salt tolerant) pine that is found natively growing in Japan, Northeastern China and Korea. Zones 3 to 7. **Growth rate**: 6-18"/year.

Pinus densiflora 'Low Glow' Japanese Red Pine A squat dense dwarf globe with bright green foliage.

Growth rate: 3-4"/year. Not available

Pinus densiflora 'Weeper' A fast growing weeping selection. Growth rate: 6-8"/year.

Large tree bands

Pinus leucodermis Bosnian Pine

Native to southeast Europe, (Albania, Greece, Yugoslavia, Northern Italy) found growing on dry, alkaline soils. Needles are stiff and have a rich deep green color, new growth has a whitish waxy hue to bark. Generally develop into tight conical shapes with striking deep green color, bluish cones are also very ornamental, slow growing, up to 30' in cultivation. **Growth rate**: 4-8"/year.

Pinus leucodermis Bosnian Pine 'Irish Bell' A dwarf selection that grows like a small doomed bush, deep green color. Growth rate: 1-3"/year. Small Tree Bands and Large Tree Bands

Pinus leucodermis Bosnian Pine 'Slim Whitey' A Laporte Ave. selection that has a narrow upright habit and expressive whitish young bark coloring, grows to 25' in 25 years. **Growth rate**: 3-6"/year. **Not available**

Pinus mugo Mugo Pine

Found growing throughout the mountains of Europe, hundreds of selections have been made. Generally forms a multi-stemmed tree to 25' tall. Easily grown in many different soil types. **Growth rate**: 3-12"/year.

Pinus mugo Mugo Pine 'Jakobsen', Dwarf selection that has a irregular contorted growth habit, stems have compacted oval shape, very different from the other selections. Dark green needles form a twisted slow clumpy growth that is quite unusual. Most likely a genetic sport selection. **Growth rate**: 1-3"/year. **Not available**

Pinus mugo Mugo Pine 'Sherwood Compact' Slow growing selection, nice short needles. Excellent choice for the small garden or rock garden. Growth rate: 1-3"/year. Small and Large Tree Bands

Pinus mugo Mugo Pine Columnar Selection Fast growing upright Mugo that looks like a very tight short needled Austrian Pine. Great pine for tight sites where a regular Austrian Pine will not fit in a few years.

Growth rate: 4-8"/year. **Small and Large Tree Bands**

Pinus nigra Austrian Pine

Easily grown pine native to most all of eastern and southern Europe's mountains. Very adaptable to alkaline soils and dry windy climates. Fast growing and insect resistant when irrigated, grows to 60-80' in cultivation. I use it primarily as my root stock for two needle pines. **Growth rate**: 12-18"year.

Pinus nigra Austrian Pine 'Arnolds Sentinel', A very upright growing selection from the Arnold Arboretum in Boston, great plant for a thin tall spire, or a tall hedge to block the neighbor's RV or boat. Expect 30' in height and 6' in width after 10 to 15 years. Growth rate: 12-18"/year. Large Tree Bands only

Pinus nigra Austrian Pine 'Helga' Slow growing dwarf with a bush like form, dense bright needles and white buds. Selection came from Germany. Growth rate: 1-3"/year. Not Available

Pinus nigra Austrian Pine 'Pinehurst', A J.M. broom selection from a tree growing on the Pinehurst golf course, first collected in 1986. Very tight growth similar to Helga. Growth rate: 1-3"/year. Not Available *Pinus nigra* Austrian Pine 'Professor Provo', A J.M. selection from a tree growing on the BYU campus in Provo, tree has a excellent compact pyramidal form and thick dark green needles, grows at half the rate of a normal Austrian Pine. Growth rate: 6"-8"/year. Not available.

Pinus nigra Austrian Pine 'Windswept' A selection made by David Salman of Santa Fe Greenhouses. The original tree had a contorted, horizontal growth habit like those pines found growing high in mountains at treeline, a good choice to put into a bonsai

training program. Short needles and dark green color. Growth rate: 3-6"/year. Not available

Pinus strobus Eastern White Pine

This pine is native to eastern North America, the giant of the eastern seaboard, once covered vast areas of the eastern states, first thing the settlers did was cut them down and built their ships, houses, furniture from the wood. I bet they only cover less then 5% of their native range. Beautiful stately trees with delicate thin blue green needles. Here in the west this tree has problems with our heavy clay alkaline soils, usually they get very chlorotic. I try to get around this soil intolerance by grafting the following selections onto our native Limber Pine. **Growth rate**: 6-24"/year.

Pinus strobus Eastern White Pine 'Blue Shag' A slow growing bush type white pine, with good blue green color and a clumpy irregular mounding shape. Can be kept under 3'tall and 3'wide even after 15 years of growth if pruned in early spring every two or three years. Growth rate: 3-6"/year. Large tree bands

Pinus strobus Eastern White Pine 'Little Twister' A selection made by Rod Ackerman who is a propagator for Bluebird Nursery in Neb.. Twisting foliage and a shrub like growth habit characterize this plant. Growth rate: 3-6"/year. Large tree bands

Pinus strobus Eastern White Pine 'Pendula' Extremely graceful weeping variety, a true living sculpture when mature. Fast growing. Growth rate: 6-18"/year. Large Tree Bands

Pinus sylvestris Scotch Pine

Of European origins widely planted and highly adaptable, has naturalized itself wherever grown. Reddish peeling bark is very ornamental, tree vigor and form is quite variable depending on seed source. **Growth rate**: 8-18"/year.

Pinus sylvestris 'Albyns' A prostrate dwarf selection that has thick bluish needles easily grown and very vigorous. A good trailer that will crawl over the largest rock or retaining wall. **Growth rate**: 4-8"/year. **Not available**

Pinus virginiana Scrub Pine

Coastal pine of the eastern states from New York to Alabama. Very tolerant of poor soils.

Pinus virginiana 'Wates Golden' Slow growing with golden yellow needle color in the winter months.

Growth rate: 6-8"/year. **Large Tree Bands**

Pinus wallichiana Himalayan Pine

An aristocrat of the white pines with long fine blue-green needles that reflex backwards, grow into large stately pyramidal trees.

Pinus wallichiana Morton's Giant' A selection from the Morton Arboretum in Lisle II. Fast growing might be a hybrid. **Growth rate**: 6-18"/year. **Large Tree Bands**

Origins of Dwarf Conifers

- Individual Seedlings
- Juvenile Fixations
- Bud Mutations "Sports" and "Witches Brooms" (Brooms)
- Alpine Forms or Mountain Forms
- Cultivariants (Upright buds produce upright growth, horizontal buds produce horizontal growth, known as Topophysis)

Of these different origins the bud mutations or "Sports" and "Witches Brooms" are the most common of the named clones or selections. All of these plants can revert or change as they grow, so judicious pruning maybe required to prevent off type growth from continuing.

Growth Standards of the American Conifer Society

- Miniatures 1" or less of growth per year
- Dwarfs 1-6" of growth per year
- Intermediates 6-12" of growth per year
- Large more than 12" of growth per year

Most all of the western conifer species will grow less then 6"/yr. if not over watered, so that would put them in the "dwarf" category according to The American Conifer Societies growth classification system. Many of the named clones or selections grow even slower, more in the 1-4"/yr. range.

Sources: Laporte Ave. Nursery, 1950 Laporte Ave. Fort Collins, CO 8052

www.laporteavenuenursery.com or Kfieseler@gmail.com