

Lakeview



Garden Center & Landscaping

Conifers for Our Region



Size

Conifers can grow from the miniature to the bodacious. Your choice depends on what size you want for the end product. Plants keep growing...the faster the growth rate, the larger the plant.



**Miniature: Less than 1" per year
Less than 1' in 10-15 years**

**Dwarf 1-6" per year
1-6' in 10-15 years**



**Intermediate 6-12" per year
6-15' in 10-15 years**



**Large 12" per year
More than 15' in 10-15 years**



Miniature: *Picea abies* “Jessy”



Dwarf: Picea abies “Fat Cat”



Intermediate-Picea Glauca “pendula”



Large- Picea Orientalalis “Skylands”



Types of conifers

Abies: Fir

Abies alba –European Silver fir

Abies Alba ‘Holden Arboretum’



Abies balsamea- Balsam Fir

Abies balsamea ‘Jamy’



Abies cephalonica- Greek Fir

Abies Cephalonica ‘Meyers Dwarf’



Abies forrestii- Chinese Fir

Abies forrestii 'Forrestii'



Abies koreana- Korean fir

Abies koreana 'Kristall Kugel'



Abies lasiocarpa- Rocky Mountain Fir

Abies lasiocarpa 'Duflon'



Abies nordmanniana- Nordman Fir

Abies nordmanniana 'Golden Spreader'



Abies numidica- Algerian Fir

Abies numidica



Cedrus : Cedar

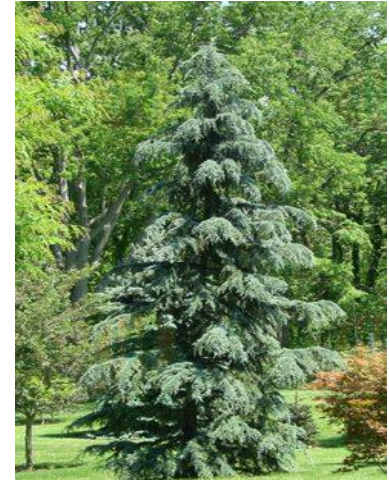
Cedrus atlantica- Atlas Cedar

Cedrus atlantica glauca 'pendula'



Cedrus deodara- Himalayan Cedar

Cedrus deodara 'Karl Fuchs'



Cedrus libani- Cedar of Lebanon

Cedrus libani 'Home Park'



Cephalotaxus – Plum Yew

Cephalotaxus harringtonia – Japanese Plum Yew

Cephalotaxus Harringtonia ‘Fastigiata’

Cephalotaxus Harringtonia ‘Prostrata’



Chamaecyparis – False Cypress

Chamaecyparis nootkatensis – Weeping Alaskan Cedar

Chamaecyparis nootkatensis ‘Jubilee’



Chamaecyparis obtusa – Japanese Hinoki Cypress

Chamaecyparis obtusa ‘Gnome’



Chamaecyparis pisifera- Sawara Cypress

Chamaecyparis pisifera

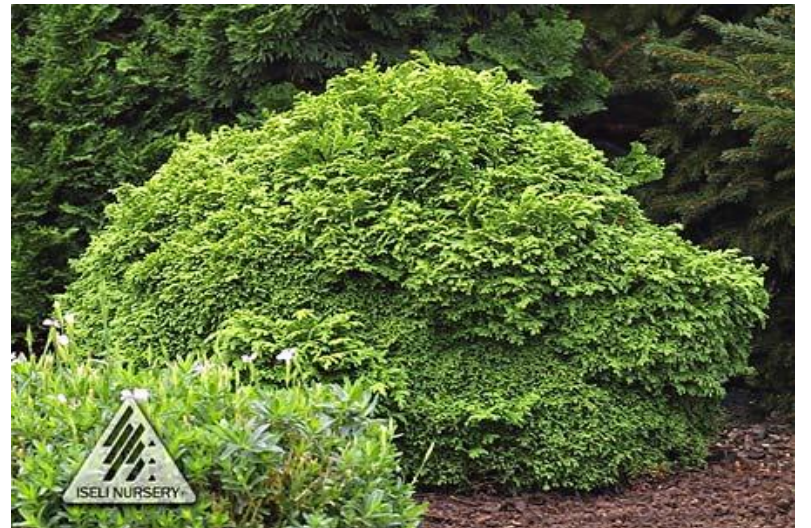
'Golden Pin Cushion'



Chamaecyparis thyoides- Atlantic False Cypress

Chamaecyparis thyoides

'Tsukumo'



Cryptomeria: Japanese Cedar

Cryptomeria japonica – Japanese Cedar

Cryptomeria japonica ‘Black Dragon’



Juniperus : Juniper

Juniperus chinensis- Chinese Juniper

Juniperus chinensis ‘Shimpaku’



Juniperus communis- Common Juniper

Juniperus communis 'Gold Cone'



Juniperus conferta – Shore Juniper

Juniperus conferta 'Silver Mist'



Juniperus horizontalis- Creeping Juniper

Juniperus horizontalis 'Mother Lode'



Juniperus procumbens- Japanese Juniper

Juniperus procumbens 'Nana'



Juniperus squamata- Himalayan Juniper

Juniperus squamata 'Blue Star'



Larix- Larch (deciduous conifer)

Larix decidua- European Larch

Larix decidua 'Prag'



Larix gmelinii- Siberian Larch

larix gmelini 'Romberg Park'



Larix kaempferi- Japanese Larch

Larix gmelinii 'Wolterdingen'



Larix laricina- American Larch

Larix laricina 'Deborah Waxman'



Larix siberica- Russian Larch

Larix russica 'Conica'



Metasequoia : Dawn Redwood

Metasequoia glyptostrobodies- Dawn Redwood

Metasequoia glyptostrobodies
'Miss Grace'



Picea : Spruce

Picea abies – Norway Spruce

Picea abies 'Formanek'



Picea bicolor- Alcock Spruce

Picea bicolor 'Howell's Dwarf'



Picea breweriana- Brewer's Spruce

Picea breweriana 'Brewers Spruce'



Picea engelmannii- Engelman Spruce

Picea engelmannii 'Blue Planet'



Picea glauca- White Spruce

Picea glauca 'Jeans Dilly'



Picea glehnii- sakhalin Spruce

Picea glehnii 'sakhalin'



Picea likiangenis- Chinese Spruce

Picea likiangenis



Picea mariana- Black Spruce

Picea mariana 'Ericoides'



Picea omorika- Serbian Spruce

Picea omorika 'Karel'



Picea orientalis- Oriental Spruce

Picea orientalis 'Tom Thumb'



Picea : Spruce

Picea pungens- Colorado Blue Spruce

Picea pungens 'Lundeby's Dwarf'



Picea purpurea- Chinese Spruce

Picea purpurea 'Balfouriana'



Picea sitchensis- Sitka Spruce

Picea sitchensis 'Papoose'



Picea x marioika- Hybrid of mariana x omorika

Picea marioika 'Machala'



Pinus : Pine

Pinus aristata- Bristlecone Pine

Pinus aristata 'Joe Bess'



Pinus banksiana- Jack Pine

Pinus banksiana 'Tuckers Dwarf'



Pinus bugeana- Chinese Lacebark Pine

Pinus bugeana 'Rowe Arboretum'



Pinus cembra- Swiss Stone Pine

Pinus cembra 'stricta'



Pinus contorta- Shore Pine

Pinus contorta 'Spaan's Dwarf'



Pinus densiflora- Japanese Red Pine

Pinus densiflora 'Low Grow'



Pinus densi-thunbergii – Japanese Red x Japanese Black pine cross

Pinus densi-thunbergii 'Jane Kluis'



Pinus flexilis- Limber Pine

Pinus flexilis 'Glauca Pendula'



Pinus: Pine

Pinus jeffreyi- Ponderosa Pine

Pinus jeffreyi 'Joppi'



Pinus koraiensis- Korean Pine

Pinus koraiensis 'Glauca'



Pinus leucodermis- **Bosnian Pine**

Pinus leucodermis
(heldreichii) 'Clumpleaf'



Pinus monticola- **Western White Pine**

Pinus monticola 'Raraflora'



Pinus mugo- Mugo Pine (Mountain Pine)

Pinus mugo 'Donna's Mini'



Pinus nigra- Austrian Pine

Pinus nigra 'Helga'



Pinus Parviflora- Japanese White Pine

Pinus parviflora 'Kinpo'



Pinus pumila- Siberian Pine

Pinus pumila 'Blue Dwarf'



Pinus resinosa- American Red Pine

Pinus resinosa 'Morel'



Pinus strobiformis- Southwest White Pine

Pinus stroboformis 'coronada'



Pinus : Pine

Pinus strobus- Eastern White Pine

Pinus strobus 'Greg'



Pinus sylvestris- Scotch Pine

Pinus sylvestris 'Jeremy'



Pinus thunbergii- Japanese Black Pine

Pinus thunbergii 'Koto buki'



Pinus virginiana- Virginia Pine (Scrub Pine)

Pinus virginiana 'Driscoll'



Pinus wallichiana- Himalayan Pine

Pinus wallichiana 'Nana'



Pseudolarix : Golden Larch

Pseudolarix amabilis- Golden Larch

Pseudolarix amabilis



Pseudotsuga : Douglas Fir

Pseudotsuga memziesii- Blue Douglas Fir

Pseudotsuga menziessi

‘Emerald Twister’



Sciadopitys: Japanese Umbrella Pine

Sciadopitys verticillata- Japanese Umbrella Pine

Sciadopitys verticillata 'Mitsch Select'



Sequoidendron : Sequoia

Sequoidendron giganteum – Giant Red
Wood

Sequoidendron giganteum
'Barabit's Requiem'



Taxodium : Pond Cypress

Taxodium distichum- Bald Cypress

Taxodium distichum
'Peve Minaret'



Taxus: Yew

Taxus baccata- English Yew

Taxus baccata 'Fastigata'



Taxus cuspidata- Japanese Yew

Taxus cuspidata 'Nana Aurescens'



Taxus media- cross Taxus baccata and Taxus cuspidata

Taxus media 'Everlow'



Thuja- Arborvitae

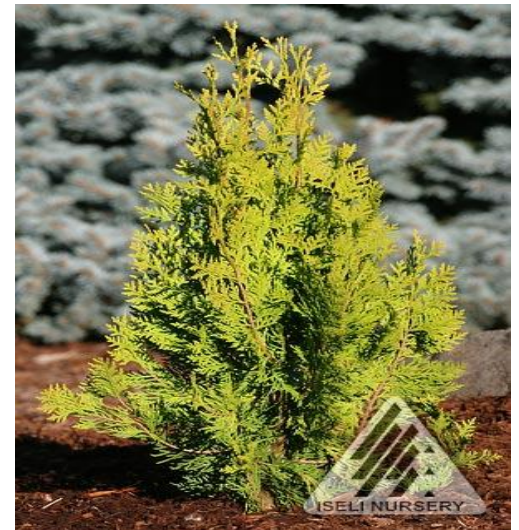
Thuja occidentalis- American Arborvitae

Thuja occidentalis 'Degroot's Spire'



Thuja platycladus- Oriental Arborvitae

Thuja platycladus 'Collen's Golden'



Thuja pilicata- Western Red Cedar

Thuja pilicata 'Whipchord'



Tsuga – Hemlock

Tsuga canadensis- Canadian Hemlock

Tsuga canadensis ‘Jean Iseli’



Tsuga diversifolia- Northern Japanese Hemlock

Tsuga diversifolia

‘Loowit’



Tsuga heterophylla- Western Hemlock

Tsuga heterophylla
'Thorsen's Weeping'



Tsuga mertensiana- Mountain

Tsuga mertensiana 'Elizabeth'



Diseases of Conifers

Needle Cast: Needle cast is a group of tree diseases that cause conifers to shed needles. The symptoms of needle cast first appear on needles as light green to yellow spots, which eventually turn red or brown. Growth of the fungi from the spots on the needle will cause death of the entire needle. There are over 40 different kinds of needle casts in North America.



Prevention & Control of Needle Cast

Prevention: Avoid planting trees on sites not suited for a particular species. Needle cast seems to thrive when conifers are under stressful conditions. This includes drought, high temperatures and excessive moisture.

Control: For control apply fungicides on the newly emerging needles through June.



fertilome systemic fungicide

Needle Blight Tree Disease: This group of needle blight tree diseases, including Diplodia, Dothistroma and Brown Spot, attack conifers at the needles and on twig tips. Infected needles often fall from the tree, creating a denuded look. Blight can result in dramatic browning of the foliage, beginning on the lower branches. Repeated annual cycles of infection can result in dead limbs and eventual loss of any meaningful ornamental value. Breaking this infection cycle has to happen to effectively stop the fungus.

Control: A fungicide spray program, repeated over several years, will eventually generate new, undamaged needles and branch tips to replace the diseased ones. Several sprayings should begin in spring, where the first spray protects the current year's needles. When symptoms of the diseases have disappeared, you can discontinue spraying.



needle blight

fertilome systemic fungicide



Canker: Cankers are among the most destructive and hard-to-manage problems of woody plants. The term “canker” is used to describe a killed or blistered area in and on the bark, the branch or trunk of an infected tree. Dozens of species of fungi cause canker diseases including Scleroderris, Fusiform, pitch cankers and Cytospora.

Most cankers are displayed as noticeable diseased areas that are sunken and discolored. Many times resin is oozing from the branches or trunk at the canker location.

Prevention: Prevention is generally easier than trying to deal with an infected tree. The best way to avoid canker diseases is to keep trees as stress free and healthy as possible. Promoting good air circulation by proper spacing, avoiding drought stress by watering when necessary, and mulching can help maintain tree vigor.

Control: There are very few control options and they will only slow the disease progression. Pruning out infected branches should only be done in dry weather. If the canker is on the trunk, everything above the canker will probably die, since the canker will girdle the trunk.

Root Rot: These are wood-decay diseases.

They may get in through wounds in the lower part of the tree or penetrate roots directly.

Conifers with root rots generally die outward from the center point, from rotten snags to fresh dead to dying to sickly in health.

Prevention: Plant trees where they should be planted. Just because you want it to grow there doesn't mean that it will thrive there.

Insect Pests of Conifers

Firs: Bagworm, Balsam twig aphid, Black pineleaf scale, Spruce Budworm.

Pines: Ambrosia beetle, Aphids, Bagworm, Black pineleaf scale, Clearwing borers, Conifer sawflies, Eastern pine shoot borer, European pine sawfly, European pine shoot borer, Pine bark adelgaid, Pine needle scale, Pine tortoise scale, Spruce spider mites, White pine aphid, White pine sawfly, White pine weevil.

Spruce: Bagworm, Balsam twig aphid, Conifer sawflies, Cooley spruce gall adelgid, Eastern spruce gall adelgid, Gypsy moth, Pine needle scale, Smaller spruce bud scale, Spruce budworm, Spruce spider mite.

Arborvitae: Arborvitae leafminer, Bagworm, Fletcher scale, Spruce spider mite.

Juniper: Arborvitae leafminer, Bagworm, Black pine weevil, Fletcher scale, Juniper scale, Spittlebugs, Spruce spidermites,

Hemlock: Bagworm, Hemlock rust mite, Hemlock woolly adelgid, Pales weevil, Spruce bud worm, Spruce spidermite

Taxus Yew: Black vine weevil, Fletcher scale.

Insecticides

Ferti-Lome Products

Tree & Shrub Insect Drench



Borer, Bagworm,
Tent Caterpillar &
Leafminer Spray



HORTICULTURAL
Oil Spray



Triple Action



Liquid Carbaryl Garden Spray



Red Spider & Mite Spray



Insect Pests of Conifers

Conifer aphids



Conifer scale



Adelgids



Conifer sawflies



Bagworms



Spider mites



White pine sawfly



Soils for Conifers

Addition of organic matter to the soil will be very beneficial in our soil types. This can be accomplished with sphagnum peat, peat humus, leaf mold, or my favorite, pine fines. The organic matter needs to be worked into the entire planting bed. I prefer to till the bed and mix the old native soil, new top soil and the organic matter together.

Our soil type in this region is mostly clay loam. This soil will retain moisture when it gets hot and dry but will also hold excessive water when we are in wet periods. So you need to dig a \$50 hole for a \$5.00 plant. In other words, build up the beds with soil, organic matter and till all contents together. It is a great investment in time and money due to the fact that your plants will thrive. If you just dig a big hole, throw organic matter in the bottom and plant the plant, you have just created a bath tub!

This is called the bath tub effect. If you lay in the bath tub with your mouth open 1" under the water you will drown and so will your plants. Poor soil conditions are the cause of many Conifer disease problems. If you take the time now and do it right, you will have years of enjoyment out of your new gardens.

When planting new container conifers, be sure to loosen up the root mass. This is very important due to the fact that the slower the plant grows, the larger the root system in the container.

Don't be bashful...use a knife and rip the roots apart. This will cause the roots to develop quicker in the new soil and negate compacted roots.

When planting, always plant the top of the root mass 1" above the ground level. Do not plant below or even to the ground because the plant will settle. When this occurs, the plant is going to be under stress. When stress occurs, problems follow.

Fertilization

Conifers are heavy consumers of fertilizer. I like to use a slow release balanced fertilizer. The slow release will allow the plant to consume nutrients over a 3 to 4 month period of time instead of a quick shot. Conifers like acidic conditions, so also use acid fertilizers.

Holly Tone is excellent and also adds nitrogen-fixing bacteria to the soil which in turn helps to create fertility from the organic matter in the soil. You can fertilize in the fall once the plant has shut down, or wait until the spring. Holly Tone should be used several times throughout the year.

Most conifers prefer acidic soils and this is a good way to acidify the soil and keep the PH down in a good range.

Fertilizers

Start & Grow



Tree & Shrub
Food



Iron Plus
Soil Acidifier



Holly Tone



Osmocote



Ironite



Pruning

You can't glue it back on, so when pruning conifers, it is best to take your time and bud prune. When pruning conifers it is wise to consider the rate at which the plant grows and the overall effect you wish to accomplish. If you want plants to look like trees to give the forest look, you need to limb up the plant and thin the top. When planted in mass this will give you the look of a forest.

It takes time to create this effect so don't get impatient and expect it over night. To control size, I prefer to start early in the plant's life and cut the new growth candle by a $\frac{1}{4}$ or $\frac{1}{2}$. This will slow the growth and fill the plant out nicely.

Control the growth of the plant so as that it does not outgrow its usefulness!

Pinus Aristata Joe Bess



Pinus Banksiana 'Tuckers Dwarf'



Pinus Mugo 'Donna's Mini'



Pinus Parviflora 'Hagoromo'



Pinus Strobus 'Niagra Falls'



Abies Balsamea 'Jamy'



Abies Koreana 'Silberperle'



Picea Abies 'Jessy'



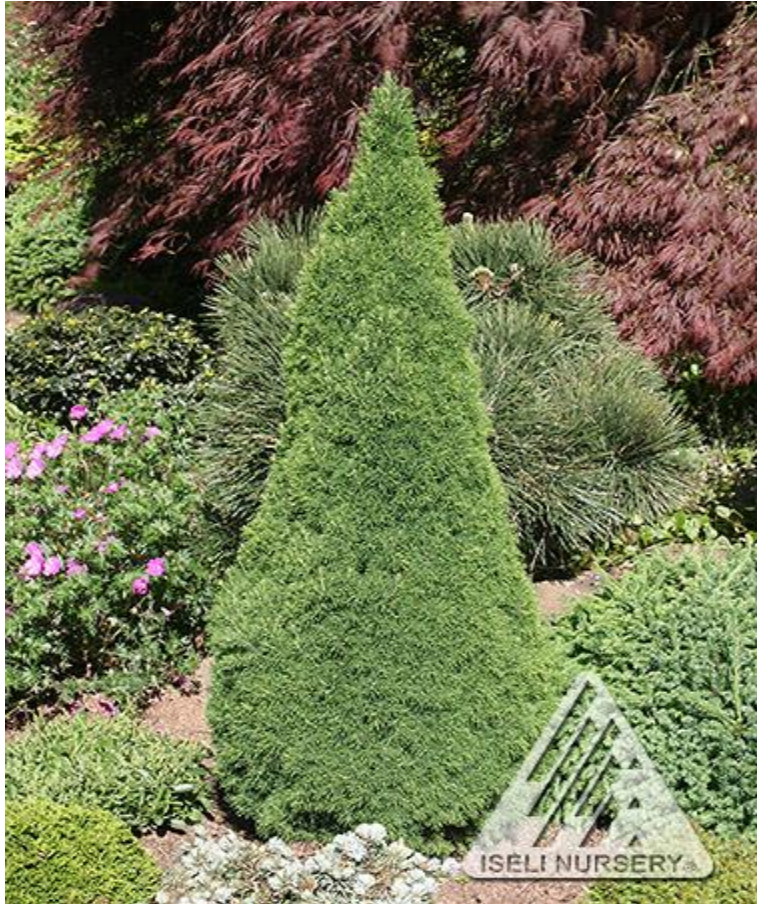
Picea abies 'Pendula'



Picea Engelmannii 'Jasper'



Picea Glauca 'Pixie'



Picea Glauca 'Hobbit'



Picea Glauca 'Pixie Dust'



Picea Omorika 'Pimoko'



Picea Orientalis 'Tom Thumb'



Picea Pungens 'Lundeby's Dwarf'



Chamaecyparis Obtusa 'Chirimen'



Chamaecyparis Obtusa 'Ellie B'



Chamaecyparis Obtusa 'Gnome'



Chamaecyparis Obtusa 'Nana'



Cephalotaxus Harringtonia 'Fastigata'



Cephalotaxus Harringtonia 'Prostrata'



Cedrus Libani 'Home Park'



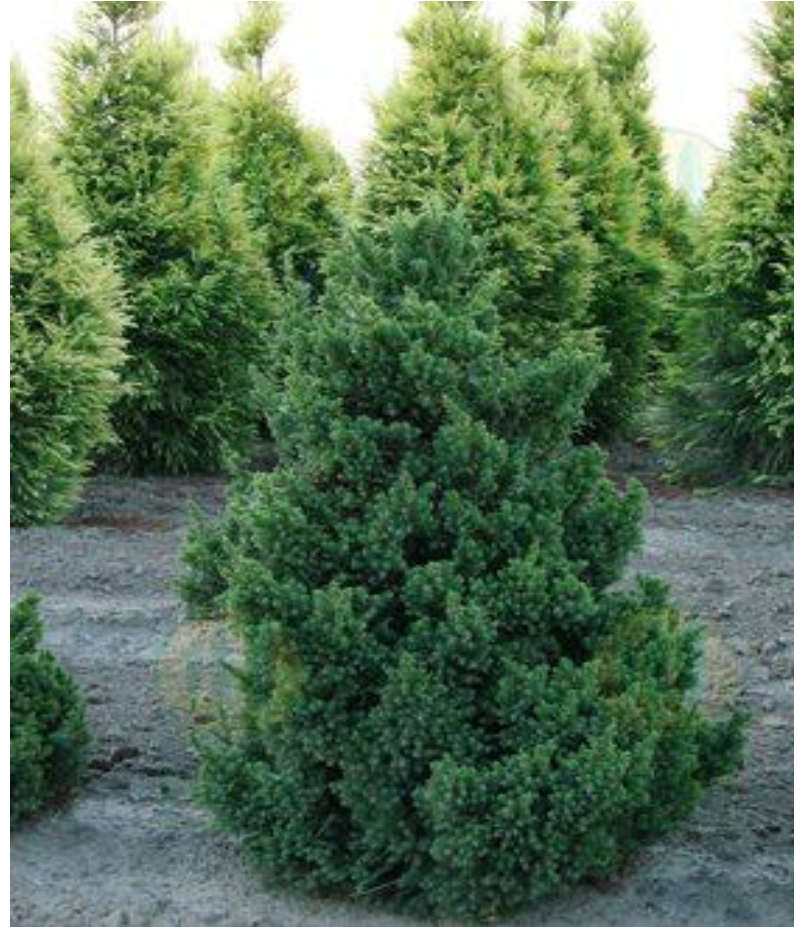
Sdiadopitys Verticillata ' Mitch Select'



Cedrus Deodora 'Karl Fuchs'



Cryptomeria japonica 'Black Dragon'



Juniperus Compressa 'Gold Cone'



Juniper Communis 'Miniature'



Juniperus Horizontalis 'Mother Lode'



Juniperus Horizontalis 'Blue Pygmy'



Companion Plants

Berberis Thunbergii 'Golden Torch'



Cotoneaster Apiculata 'Tom Thumb'



Ginkgo Biloba 'Mariken'



Ginkgo Biloba 'Jade Butterflies'



Acer Palmatum 'Beni Heme'



Acer Palmatum 'Mikawa Yatsubusa'



Acer Palmatum 'Shaina'



Acer Palmatum 'Orange Dream'



Acer Palmatum 'Shidhigashira'
Lions head



Acer Shirasawanum 'Aureum'





ELY-THOMAS
LUMBER CO.

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Web Pages for Conifers

Bizon Nursery

Bizonnursery.com

Buchholz Nursery

Buchholznursery.com

Iseli Nursery

Iselinursery.com

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Lakeview 
Garden Center & Landscaping

Lakeview...where the uncommon is common

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If you would like to receive a copy of this presentation “Conifers for our Region”, please e-mail me and I will send you a pdf.