

# Illinois State University Horticulture Center Pinetum

Independent Study Program for Nick Pershey Spring 2009



Contact Jessica Chambers, Horticulture Center Coordinator

136 Ropp Agriculture Building

Campus Box 5020

Normal, IL 61790-5020

(309) 438-5653

## Why Conifers?

Conifers, or cone-bearing plants, are one of the most diverse and widely-adapted plant groups in the world. The Great Basin Bristlecone Pine at 4,900 years, the California Redwood at 379 feet, and the Giant Sequoia at 12,334,000 pounds hold records for the oldest, tallest, and most massive plants on earth.

While these traits may not be desired by most gardeners, thousands of selections made from over 100 species are quite well-suited to the Midwest's growing conditions.

Because conifers continue to grow as long as they are living, they are measured by *annual rate of growth* rather than ultimate size. They are classified according to the American Conifer Society's following size classes.

Large:	12+'' per year	(15' plus in first ten years)
Intermediate:	6-12'' per year	(6-15' in first ten years)
Dwarf:	1-6'' per year	(1-6' in first ten years)
Miniature:	<1'' per year	(Under 1' in first ten years)

A variety of growth habits manifest themselves in each category including narrow columns, globes or mounds, artistic weepers that hang like curtains, abstract living sculpture, and of course, the familiar conical pyramids that have become commonplace.



Conifers, with their permanence and substantial architecture, provide the backbone of the garden as they set off other plants that wax and wane with the seasons. The variety of growth habits provide gardeners with numerous opportunities to personalize their gardens.

## The Pinetum at the ISU Horticulture Center

In order to enhance the mission of the Horticulture Center at Illinois State University of promoting sustainable, smart plant choices that everyone can enjoy, a collection of conifers, also known as a *Pinetum*, will begin construction this spring. The focus of the garden will be the diverse nature of these plants and their suitability for the home landscape in Central Illinois.

The garden will showcase over 100 conifers, mostly dwarf in size, which provide colorful and artistic plant choices for gardeners challenged by today's ever-shrinking urban or suburban lots.

### Our Mission:

- To provide a public resource for community residents, campus visitors, and horticulture professionals to study and observe conifers in a landscape or garden setting.
- To expand the resources available to the Illinois State University faculty and students for classes including plant identification, landscape and turfgrass management, and garden design principles.
- To assess the adaptability of different conifers in Central Illinois for professional and homeowner decision making.
- To enhance the overall aesthetics of the Illinois State University Horticulture Center

**In order to meet these goals, we are in need of support. Please consider making a donation in order to make this garden a reality in our own community.**

Objectives: To Provide, Expand, Assess, and Enhance

## Not Just “Evergreens”

Not all conifers are evergreen. The word conifer simply identifies a plant as one that bears cones (as opposed to other plants that bear flowers). In fact, there are deciduous conifers as well as those with foliage other than green

Larches, Baldcypress, Dawn Redwood, and conifers' close relative, Ginkgo, all lose their leaves in the fall like the more familiar shade trees. Larches and Ginkgo exhibit an intense yellow fall color, while Baldcypress and Dawn Redwood are bronze and burnt-orange.

The most frequently used conifers in the landscape are easily overlooked, but many fine selections have been made that make striking departures from the traditional green “evergreens”. Such plants may exhibit variations in foliage colors from light to dark green, many hues of blue, silver, yellow or gold, to even orange or plum purple.

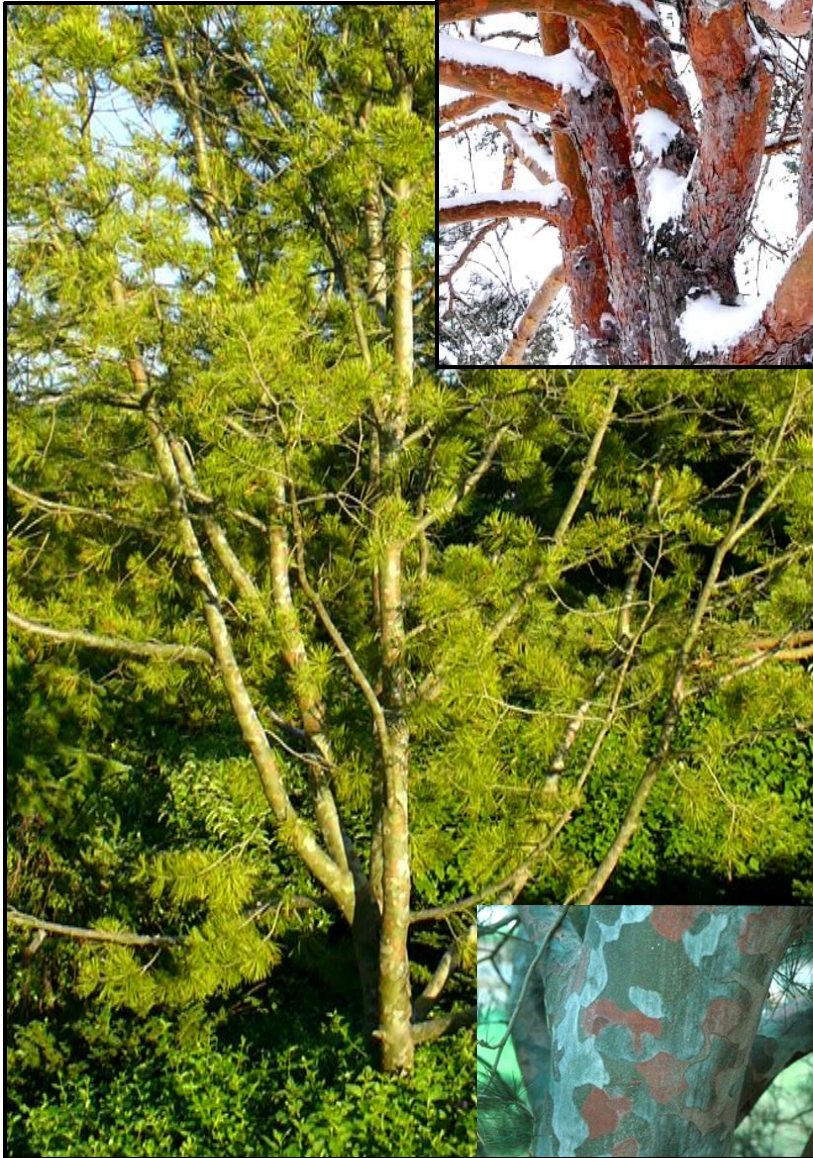
Variiegated conifers may have green or blue foliage with yellow or cream-colored tips or randomized patches. Emerging cones on particular selections may lead one to believe the plants are “blooming” as they can be bright pink, rose-red, or even indigo-blue.

Some conifers are even planted for their showy orange, white, or camouflage-pattern bark.

The following pictures only hint at the vast array of foliage colors and variegation, new shoot appearance, cone color, and foliage texture available to augment the avid gardener's plant palette. All pictured selections will be included in the ISU Pinetum.



Not Just “Evergreens”



Above:  
Scotch Pine (*Pinus sylvestris*) has perhaps the most attractive bark of any conifer hardy in the Midwest. With age, the trunk, beginning a few feet off the ground, and the upper branches can become almost orange. As shown here, snow can be a pleasant accent when it falls on conifers.

Left:  
True to its name, Lacey bark Pine (*Pinus bungeana*) has mottled bark that peels to reveal patches of gray, olive, and maroon. Interestingly, the U.S. Army is reported to have adapted the bark to make its camouflage pattern for fighting in the German Black Forest.

## Ornamental Bark



Above Left:  
Often called the “Flowering Spruce” for its magenta young cones in May to June, Acrocona Norway Spruce (*Picea abies* ‘Acrocona’) is a must-have for a colorful garden accent.

Above Right:  
Young cones on Hoop’s Colorado Blue Spruce (*Picea pungens* ‘Hoopsii’) add yet another ornamental dimension to this dazzler. In heavy-coning years, the effect is nothing short of stunning.

Right:  
Indigo blue cones on many varieties of Korean Fir (*Abies koreana*) surprise many first-time observers. The cones are especially attractive in late spring to early summer before they mature to become woody structures.



Unique Cones

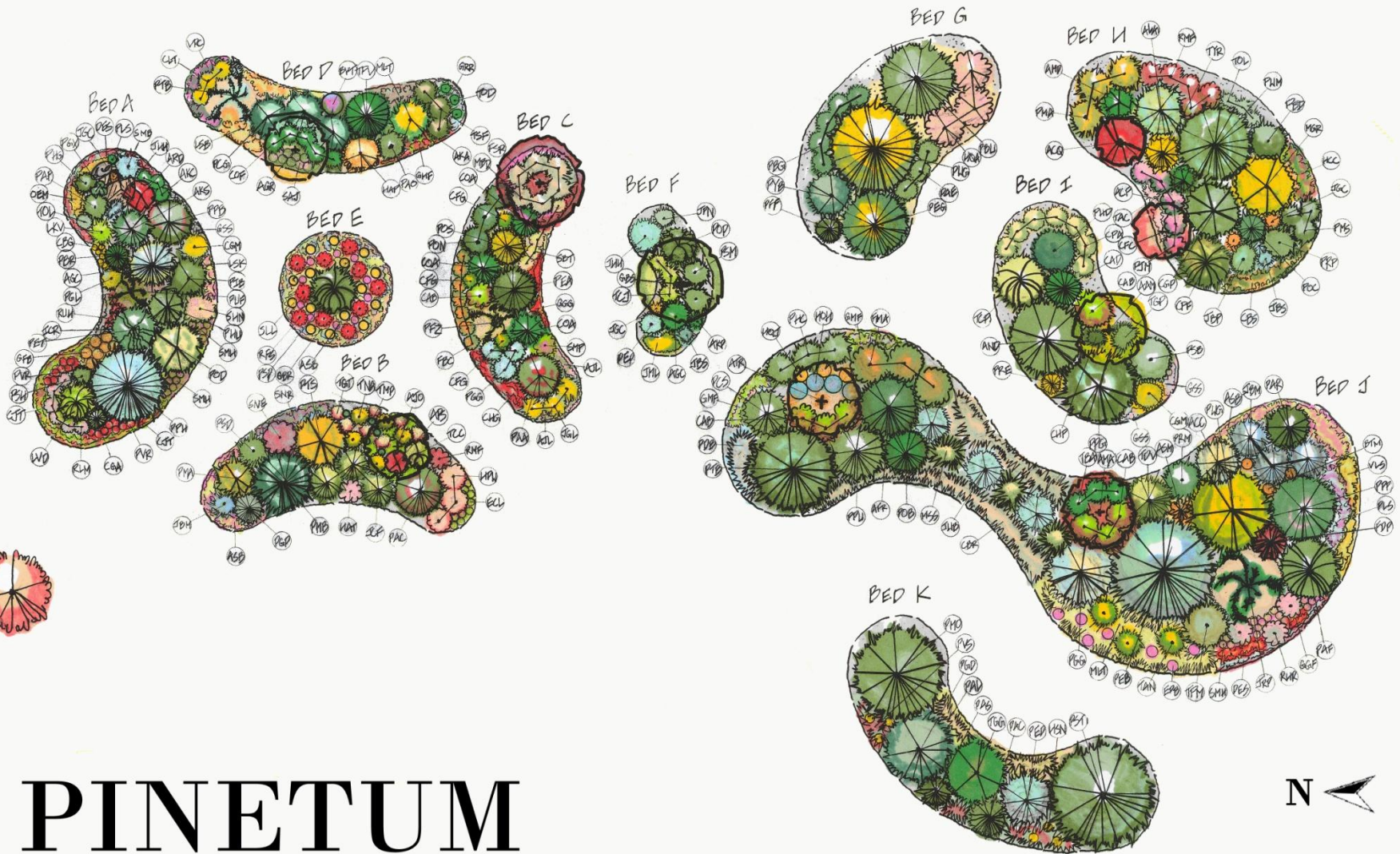


New growth on Taylor's Sunburst Lodgepole Pine emerges bright gold in May/June and gradually changes to green as the needles mature in summer.

Silberlocke Korean Fir (*Abies koreana* 'Silberlocke') is among the most unique of conifers for its recurved needles that wrap around the branchlets to reveal the silvery-white undersides

Hoop's Blue Spruce (*Picea pungens* 'Hoopsii') has become the standard by which all other blue spruces are judged due to its intense silver-blue needles.

In early spring, the new growth of Cruenta Norway Spruce (*Picea abies* 'Cruenta') appears blood red gradually changing to green by late spring.



# PINETUM

PERMANENCE, ARTISTIC FORM, AND COLOR COME TOGETHER IN A MYRIAD OF RARE AND UNUSUAL CONE-BEARING PLANTS KNOWN COLLECTIVELY AS CONIFERS.

DESIGNED BY NICK PERSHEY

horticulture center  
ILLINOIS STATE UNIVERSITY



# Pinetum Installation Schedule

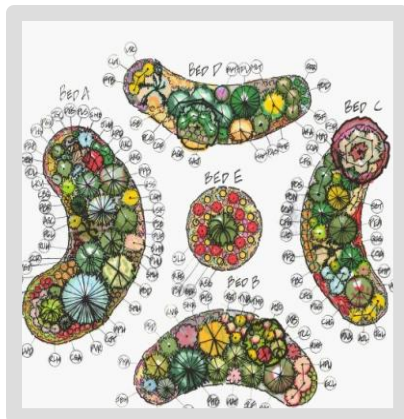
In order to complete the pinetum on a step-by-step basis, incremental funding will allow for planting annually until the garden is finished. Therefore, the installation process has been divided into five equal phases, each requiring approximately \$5,500 to complete.

Since preparing the planting beds is the first priority in any planting situation, Phases One, Three, and Five will involve the purchase, mixing, and mounding of a mixture of topsoil, sand, and compost to create the raised beds that support the plants. Planting the beds in stages will keep the garden in scale as it matures. Think of each stage as putting layers on a cake- it keeps getting better, but even the first layer rewards.

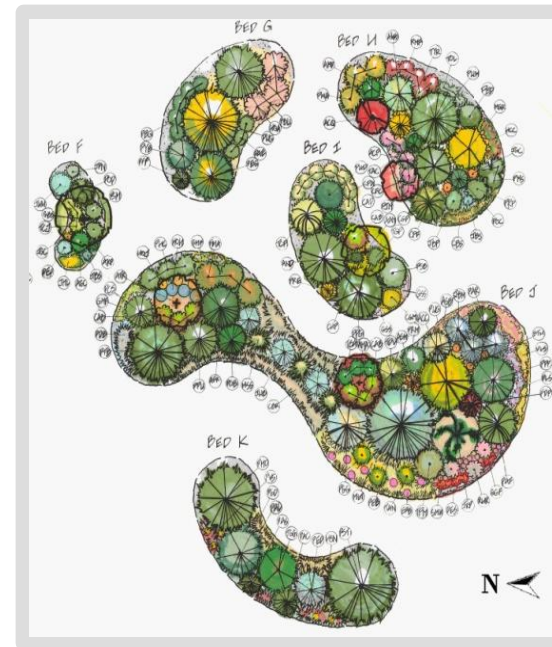
The plants will be installed in a sequence that places key structural members of the garden first that will direct key sightlines, block wind for smaller conifers, and provide substantial visual interest with extraordinary ornamental features. Just as would occur if building a house, the framework must be built before the trim and finish work begins. As the funding for each phase becomes available, more plants will be installed bringing the planting closer and closer to completion.

Beds A through E will be the primary focus of Phases One and Two while Beds H through J will be at least partially finished by Phase Four. Phase Five will address Beds F, G, and K and complete the project. Signage for plants of interest will be created as they are installed and all plants will be individually labeled.

## Phases 1-3



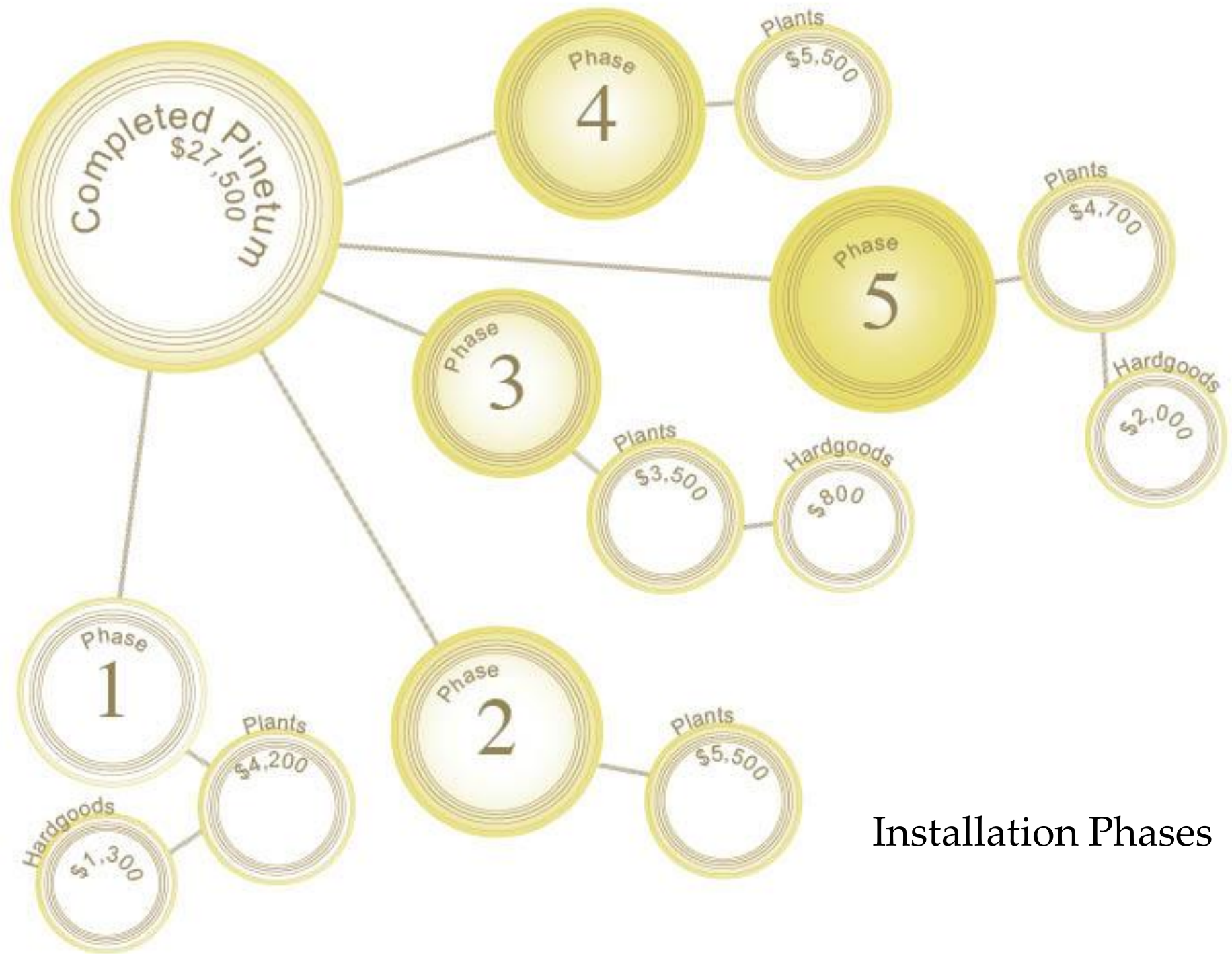
## Phases 3-5



## Plants to be included in Phase 1

- |                                  |                                  |
|----------------------------------|----------------------------------|
| Silberlocke Korean Fir           | Taylor's Sunburst Lodgepole Pine |
| Hoop's Colorado Blue Spruce      | Skylands Oriental Spruce         |
| Dwarf Blue Arizona Corkbark Fir  | Acrocona Norway Spruce           |
| Green Arrow Weeping Falsecypress | Emerald Arrow Bosnian Pine       |
| Varied Directions European Larch | Dwarf Japanese White Pine        |
| Pendula Bruns Serbian Spruce     | Gold Korean Fir                  |
| Emerald Twister Douglasfir       | Fernspray Hinoki Falsecypress    |
| Dragon's Eye Japanese Red Pine   | Blue Swiss Stone Pine            |
| Fairview Chinese Juniper         | The Blues Colorado Blue Spruce   |
| Cruenta Norway Spruce            | Virescens Giant Arborvitae       |
| Weeping White Spruce             | Weeping Eastern White Pine       |
| Morris Blue Korean Pine          | Uncle Foggy Jack Pine            |

...and more if we can



Installation Phases