

# **Under The Oaks**

#### Arboretum Newsletter

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## The Long and Fascinating History of Conifers

Conifers or cone-bearing gymnosperms are the earliest trees known, appearing in the late Paleozoic age, about 220,000,000 years ago. They were present when the dinosaurs came into being during the Triassic period, and were wide spread when the angiosperms (flowering trees) developed. The extinction of the dinosaurs and the rise of primitive mammals in the upper Cretaceous period accompanied the rapid increase of angiosperms, which became the dominant tree type of that time to the present age.

Although less numerous than the flowering trees, the conifers have a real presence in our daily lives. They are softwoods, and contribute a diverse selection of essential, useful, and engaging products. Timber, pulpwood, turpentine, resin ( the fragrance helps keep pests that might damage the trees at bay), mulch, and Christmas trees are some of the products we are familiar with, along with the more recent appearance of pine nuts on our grocery shelves. Indigenous people in the southwest had a ready source of food from these nuts, while forest occupants along the Pacific costal regions used the bark and roots of conifers for food, medicine, clothing and other necessities.

The native conifers of the Sierra Nevada mountain range in California include some of the most impressive trees in the world. The tallest and the oldest living trees are conifers in this area, the Coast Redwood (Sequoia sempervirens) being the tallest, and the Great Basin Bristlecone Pine (Pinus longaeva) the oldest. The giant sequoia (Sequoidendron giganteum) is the most massive tree and possibly the largest organism alive.

Our southern conifer of note, the Bald Cypress (Taxodium distichum), dates back to the Triassic age, its ancestors existing about 185 million years ago. In autumn its foliage turns a beautiful rust color and later falls to the ground. It is often seen in swampy areas but grows on dry sites as well. This season particularly, it pays to pay attention to the wonderful conifers.

By Jenny Sabatier, Master Gardener, Urban Forestry Advisor Intern

#### Conifer Gardening is Heating Up in Memphis

The Memphis Botanic Garden is now home to one of only four Conifer Reference Collections in the state of Tennessee. The Conifer Collection, established in 1981, and updated in 2002, has been recently groomed, labeled and mapped, by a diligent team of volunteers led by Laurie Williams.

In order to be certified as a reference collection, our conifer garden had to meet certain requirements as outlined by the American Conifer Society (See Reference Gardens at: http://conifersociety.org). The Conifer Reference Collection now serves as an educational resource

## Cedar of Lebanon - A Celestial Gift



Cedar of Lebanon (Cedrus libani) -handsome, practical, artistic, spiritually endowed. Can one species promote all for both professionals and home gardeners living in the area.

Here, even a novice, can compare the attributes (size, shape, color, and durability!) of a wide variety of conifers that like living in the Southeast. The first group to tour the collection was attendees at the Southeast Region Conifer Conference held at the Dixon Gallery and Gardens in October 2013.

Currently, our reference collection consists of approximately 300 individuals and includes 100 different species. If you don't have time to see them all, below is a list of the Tree Team's favorites. Stop by the front desk and ask for the Conifer Reference Map to guide you as you explore the many beautiful conifers in our collection.

#### TREE TEAM'S TOP TEN:

- Japanese Garden:

- 95 Cunninghamia lanceolata
  Common Chinafir
- 99 Pinus densifolia 'Oculusdraconis' Dragon's Eye Pine
- 118 Sciadopitys verticillata Japanese Umbrella-pine
- 184 Glyptostrobus pensilis
  Chinese Water Pine
- 873 Cedrus lebani 'Pendula'
  Weeping Cedar of Lebanon
- Conifer Garden:
  - 147 Taxodium mucronatum

#### the above qualities?

This beloved tree has a single thick trunk with branches that spiral around it. When young the crown is cone-like, but with age becomes flattened, and the dark grayish rough bark acquires deep cracks. Cedar of Lebanon has both long shoots and short shoots. The bright or blue-green needles on the long shoots are apart, on the short shoots they attach in clumps of 15 to 45. The tree's total effect is almost surreal.

On the practical level, ancient civilizations used this cedar for building boats, houses, and furniture. Its resin was used in mummification. Being naturally repellent, the sap was used to protect wood from insects and fungi and to treat certain diseases. So many trees were cut and exported for boat building and other uses that the multitude of Cedrus libani forests became thinned out to an alarming degree.

In ancient times a Pharaoh imported the cedar to make the doors of his palace, and this type door became popular in the area as well as in Greece and Rome. King Solomon used the cedar in building the great Temple of Jerusalem, and the altar in the shrine of the Ark of the Covenant.

Babylonians believed the cedar was beloved by the gods. As early civilization came to Mesopotamia the cedar was regarded as the home of Ea, the god of wisdom, and creator of the human race. Being the god's residence, the cedar became the place where oracles were Mexican Bald Cypress

- 748 Pinus strobus 'Contorta' Contorted Eastern White Pine
- My Big Backyard:
  - 632 Cedrus atlantica 'Glauca Pendula' Weeping Blue Atlas Cedar
- Azaela Trail:
  - 853 Cryptomeria japonica
    'Araucarioides' Araucioides
    Japanese Cedar
- Butterfly Garden:
  - 792 Taxodium distichum 'Cascade Falls' Weeping Baldcypress

By Deb Foehring, Master Gardener, Urban Forestry Advisor delivered. Later the Chaldeans used its branches in magic rituals. In the Bible it is said to be mentioned seventy-five times. The Lebanon government is currently working to replenish the Cedrus libani forests.



By Jenny Sabatier, Master Gardener, Urban Forestry Advior Intern

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