

# Trees . . . WOW!


Archiving the genetics of the world's largest trees before they're gone and replanting global forests to fight climate change

Seattle Urban Forestry Commission  
July 13, 2016



Philip Stielstra  
Seattle Tree Ambassador  
pstielstra@comcast.net  
<http://incelebrationoftrees.com>





Stream free

Purchase

# Moving the Giants

an urgent plan to save the planet



# Trees ↔ Climate Change

- To archive the genetics of the world's largest trees before they're gone and
- To replant global forests to fight climate change.





In March 2016 Archangel Ancient Tree Archive launched an expedition to collect and archive the genetics of some of the oldest, largest, and perhaps most important trees on earth – the coast redwoods and giant sequoias. When I found out that I could play a part in that trip, I jumped at the chance. I wanted to learn more about how you could archive the genetics of the largest trees and use those to replant forests to fight climate change.





# In Celebration of Trees

[Welcome](#)[Expedition Blog](#)[Sources of Inspiration](#)[About](#)

## Welcome

Welcome to **In Celebration of Trees!**

Follow my [Expedition Blog](#) and you will be able to receive updates with photos and video clips of an amazing tree climbing expedition being led by David Milarch and Archangel Ancient Tree Archive from May 21-28, 2016. I will be their guest as they travel to California to collect and archive the genetics of some of the oldest, largest, and perhaps most important trees on earth – the coast redwoods and giant sequoias. This should be an exciting journey! I hope you can come along.

Also see below and check out my [Sources of Inspiration](#) pages to hear about people who have accomplished amazing things in planting trees to combat climate change.

Philip Stielstra

[Sources of Inspiration](#) calls out some of my heroes that have done so much to reverse the trend of tree loss on this planet. You will find stories, photos, videos and links to many

## Blog links

- › [Welcome](#)
- › [Expedition Blog](#)
  - › [May 21](#)
  - › [May 22](#)
    - › [Pics & Clips from 200 ft up](#)
  - › [May 23](#)
  - › [May 24](#)
    - › [Video clips from the Stagg tree](#)
  - › [May 25 & 26](#)
  - › [May 27](#)
  - › [May 28](#)
  - › [How Cuttings Become Trees](#)
  - › [Planting Archangel Trees](#)
  - › [Inspiring Action](#)
- › [Sources of Inspiration](#)
  - › [Jean Giono](#)





# Alder Creek Grove Sierra Nevada Mountains

- 700 acres of private property with stands of young and mature giant sequoias
- Stagg Tree – 5<sup>th</sup> largest in world by volume (42,557 cu ft)
- Waterfall Tree – largest circumference at ground level in world (155 ft)









# Expedition Team

Archangel Ancient Tree Archive – Jake Milarch – Michigan

Bo Burke/Sam – Climb-A-Tree - Michigan

Andrew Kittsley – BCMA, Orlando City Arborist - Florida

Jim Clark – Tree Machine, Inc. - Indiana

Damien Carré – Expedition Old Growth - Oregon

Bartlett Team – Jason Kappan, Jake Careful, Autumn Careful, Wayne Ellison,  
Richard Ellison, Aaron Johns - Michigan

Joe Aiken – Arborjet - Michigan





















GIANT REDWOOD DEDICATED  
AMOS ALONZO STAGG  
IN HIS 99<sup>TH</sup> YEAR 1960  
CIR. 95' DBH. EST. AGE 3000 YRS  
JORDAN MT PEAK  
TULARE COUNTY, CALIF













Gathering cuttings from the outer tips of the branches

























Inspecting the cuttings at the Archangel lab in Copemish, Michigan.





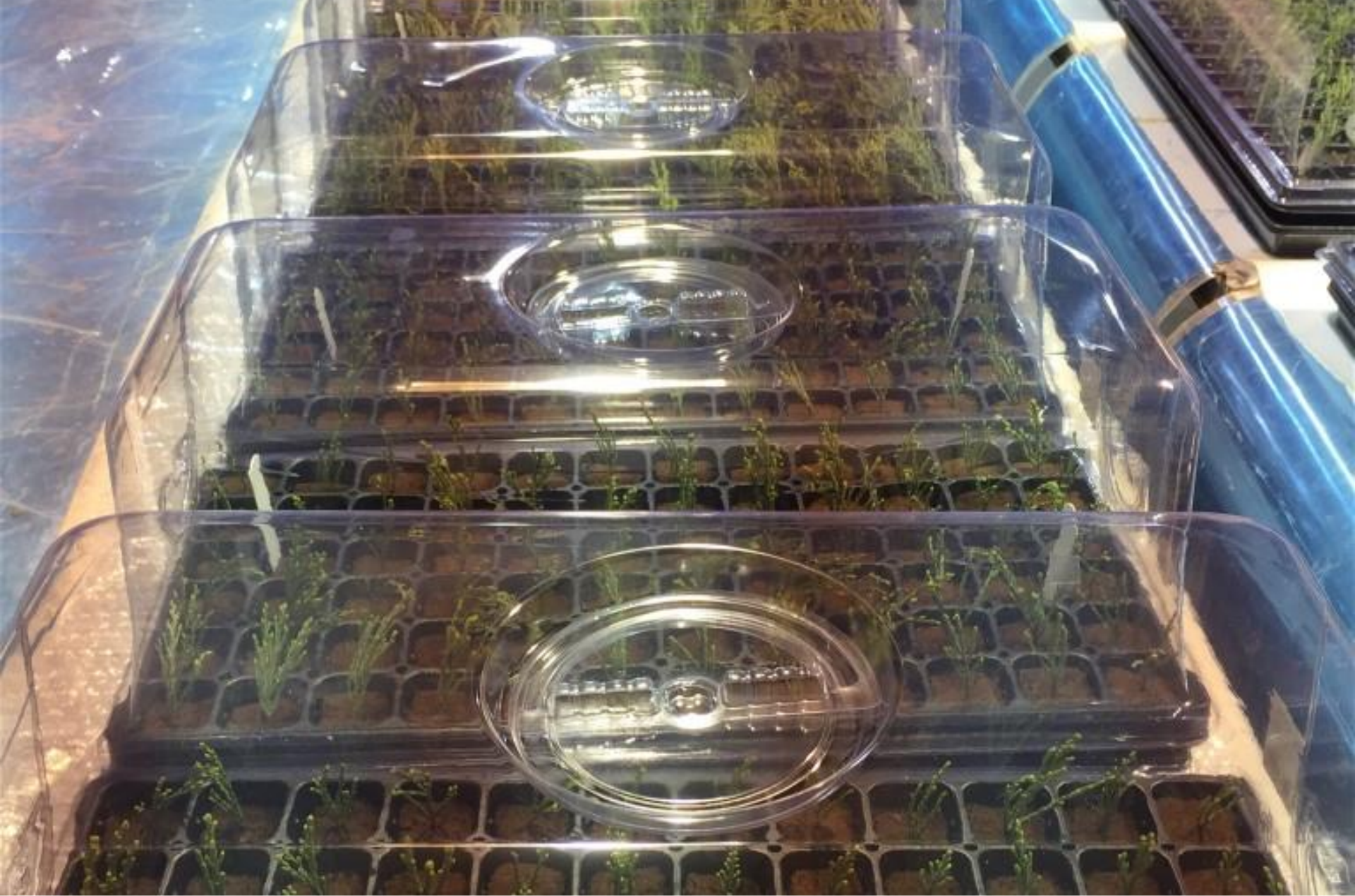
Cuttings are washed in a tissue-friendly disinfectant for about 10 minutes and then the best tips are selected for planting.





Then the cuttings are dipped in a hormone concentration to stimulate root growth and placed into a rooting cube.





Many flats with 72 plants each will turn cuttings into trees with the same genetics as the tree they were cut from.





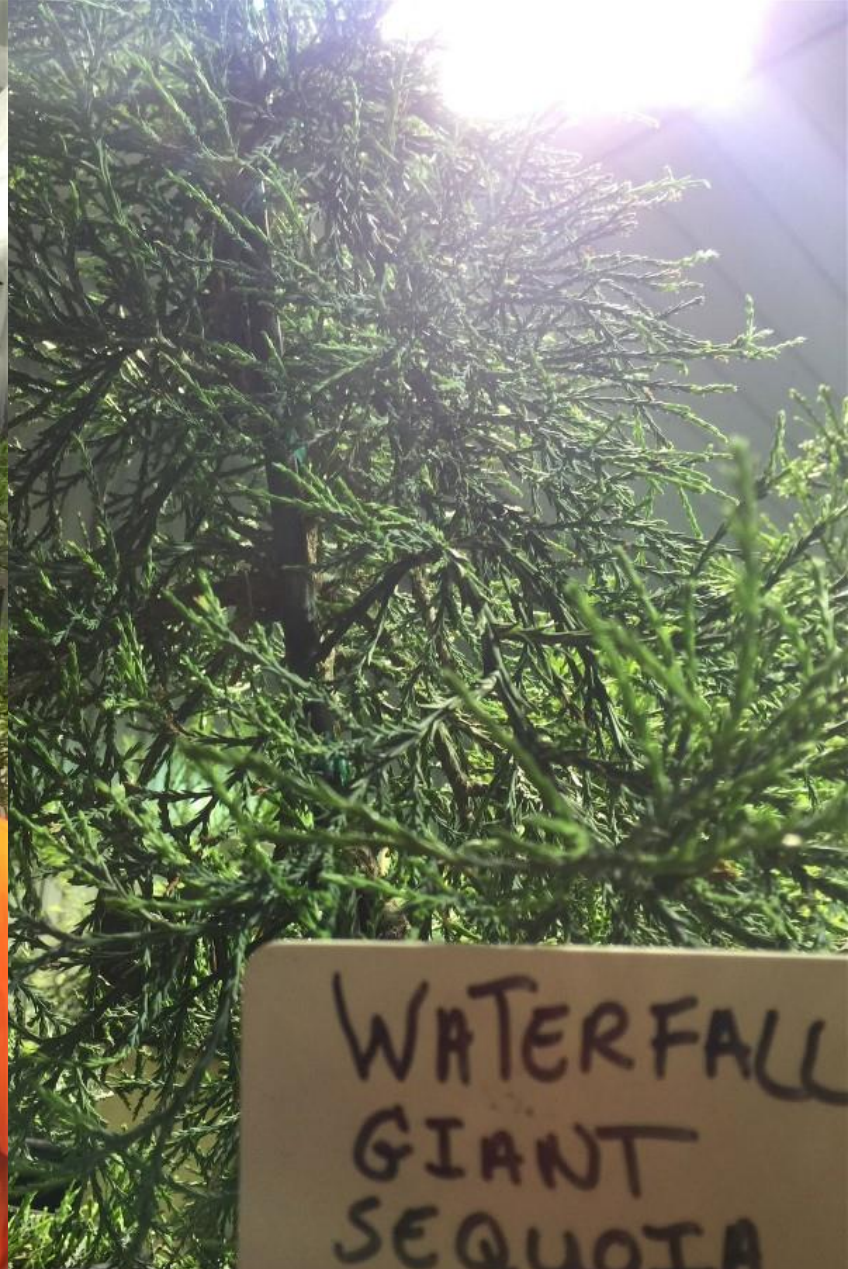
Tissue culture is another method of propagation using smaller tips. Look closely at the image on the right. The little tree in there, from a genetic standpoint, is over 3000 years old. That's amazing!





Once the plantlets are in their tissue culture vessels, they are put under special spectrum lighting.





There are over 2,000 clones in the Archangel nursery that are sapling size and ready for planting.





The first Archangel champion coast redwood clone being planted at Ocean Mountain Ranch south of Port Orford, Oregon on Dec 4, 2012.



# Trees ↔ Climate Change

- To archive the genetics of the world's largest trees before they're gone and
- To replant global forests to fight climate change.





A low-angle photograph looking up at several massive, ancient-looking redwood trees in a forest. The trees are tall and slender, with deeply textured bark. Sunlight filters through the dense green canopy above, creating a dappled light effect on the forest floor. In the foreground, there is a thick layer of green ferns and other undergrowth. The overall atmosphere is serene and majestic.

**Thank you.**