

# Interconnectivity Tree Research Project

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hy are we so in awe of the old oak and the ancient redwood tree? Why does sitting beneath a spreading sycamore feel like a spiritual experience?

HeartMath's scientists have focused especially on oak and redwood trees as they seek answers to a number of questions. For instance, given our close relationship to trees through the millennia, can electrical responses in multiple trees correlate to events that trigger huge emotional outpouring in large numbers of people?

# What We Know

- Oak and redwood trees in different locations at HMI's California campus and research center have different overall electrical voltage patterns.
- Trees, like humans, have a circadian or daynight rhythm.
- Trees, can elicit positive feeling states in humans.
- Trees provide Earth with oxygen, and they clean our air.

# **Scientists Will Explore**

• How people and trees are energetically connected.

- How trees are affected by human emotions.
- How people are uplifted while in the biofields of trees.
- How trees can inform us about approaching earthquakes.



# Next Steps

- 1. Acquire and install additional sensors, communication equipment and software.
- 2. Create a network system that allows researchers to record many trees simultaneously in different forest locations.
- 3. Add to the network an additional 20 trees at

strategic locations in the redwood forest surrounding the HMI campus.

4. Collect data on different types of trees and tree stressors such as location.

From HMI Director of Research Rollin McCraty Ph.D. ... "We will be looking at how a tree's electrical potentials are affected by a number of obvious environmental factors such as temperature, light and water, but also the gravitational pull on the earth by the sun and moon (Earth tides) and changes in the earth's magnetic fields."

If the institute's initial studies determine trees are energetically interconnected with and/or can help in earthquake prediction, "We envision expanding the tree-monitoring system to include forests in other geographical locations."

For a number of years, HeartMath Institute (HMI) studied the electrical activity of trees in relation to our interconnectivity research. With your support, we hope to expand efforts in this area.

For instance, trees have a surprisingly complex range of electrical activity and rhythms. Now we want to measure this activity from groups of trees. By looking at the activity of trees in groves and at different locations in a forest, we hope to see how trees not only may be communicating with each other, but also how they may respond as a group to human emotions.

Scientists know trees, like humans and other living things, have a circadian or day-night rhythm and other rhythms and activity. For example, these electrical rhythms are coupled partly to the sun and moon's gravitational pull on the earth.

There's a lot more to learn about trees, especially how they may respond to human emotions, and how being in the presence of their biofields can have an uplifting effect on people. Our scientists have been preparing in recent years to expand our tree research, and HMI/ GCI is making this appeal now so they can begin.

# HMI's tree research benefits people by:

- Providing a deeper understanding of how people and trees are energetically connected.
- Gathering information about how trees re-

spond to human emotions generally and how they respond to positive human emotions in particular.

- Collecting data before earthquakes to aid in prediction and saving lives.
- Establishing a network of tree-monitoring sites and a website with live data from a redwood grove that allows public interaction with the trees at any time.

## View Images of Tree Sensor and Recordings

Another rather amazing observation has been that some of the longer-term trends in trees recordings seem to respond to the approach of earthquakes. An exciting theory NASA Ames scientist Friedemann Freund with whom we are collaborating, has developed a theory that explains how rocks deep in has proposed in the earth act as batteries when they are stressed by tectonic forces preceding earthquakes. The electrical charge carriers flowing through these rocks appear to cause a response in the electrical activity of trees. This theory also explains how the electrical change carriers that flow through the rocks appear to cause a response in the electrical activity of trees. The changes in trees' electrical activity could be a way to better predict earthquakes.



The HearthMath Institute can be found at www.HeartMath.org