

LIGHTS and SHADOWS

from the
Dishman Hills

February 2013

TREES CAN TALK

As a Conservancy we oversee a population of trees called a forest. For us trees provide natural habitat for the native plants and animals, and provides quality recreational space outside the busy city. For most, trees mean wood to build, apples for pies, a warm fire in winter and a bit of shade on a hot summer afternoon. But these magnificence plants are so much more. They spend their entire lives serving us by producing oxygen, stabilizing soils, and fixing atmospheric carbon to compensate for our excesses. On a deeper level, we are finding that trees record valuable information from the past that can guide us into a better future. For some time now, archeologists and foresters have used tree rings to document the history of climate change, wildfire frequency, and the dating of ancient habitat sites. New uses of tree rings and wood chemistry are expanding our understanding of the world around us in some very creative ways.

The Washington DNR has used the dating of wood in large landslides to define the periodicity of major earthquakes in the Pacific Northwest. The last "big one" was in the year 1700, and the frequency is about every 350 years, so we are good for awhile (no guarantees!). Astronomers are using the sharp rise of carbon-14 and beryllium in dated tree rings to document super collisions in space between neutron stars or black holes that resulted in gamma-ray burst that created these elements in the atmosphere for a short time. Other elements found in tree wood such as lead, zinc, copper, and cadmium are being used by scientists to map local pollution problems, and to indicate pollution sources. Trees not only catch these elements in the air, but also absorb them from the soil and the rocks beneath. Some mineral exploration techniques involve the analysis of tree wood to see if they have been drinking up bits of a valuable mineral deposit below.

Information captured in tree rings is a useful tool in understanding global climate change. Trees are wonderful data sources since they are scattered all over the world, and record historical information. You might say they are four dimensional. The measurement of carbon isotope concentrations in tree rings can estimate changes in carbon dioxide emissions from fossil fuel combustion. Problems of forest heath today are visible testaments to a changing climate, and the change in growth patterns in tree rings give us some idea of the rate of change.

Trees outstrip most people in the extent and depth of their work for the public good—Sara Ebenreck, American Forest

In Canada scientists are joining the police to crack down on tree thefts by matching DNA of stolen wood with the DNA of the stumps left behind. While this is a very new application of tree science, it is born from a rapidly increasing problem in many forests. Using the genotype of a tree to fight the night time removal of the rarest and finest trees in the public inventory could be a powerful tool for the future conservation of a resource that we cannot replace. Currently, this data is being reviewed by lawyers to see if this can be used in court.

Our forest of trees stand quietly over our community as sentinels and watchers, slowly recording our activities without judgment. They are doing all they can to buffer changes around them and suffer without complaint. We need to keep them, that's what a Conservancy does.

HEADS UP!



The Conservancy will be hosting our first social event of the year next month on March 23rd. Then we will toast Michael Hamilton for his 20 years as President, and the new President, Jeff Lambert will cover where we are at now and where we are going in the future. This should be fun as well as informative. Details are on the reverse of this newsletter as well as at our website.

On April 21st the Conservancy will celebrate Earth Day by running our fifth service day in the Natural Area. Starting with a 11:15am checkin at Camp Caro, work groups will form to build and restore trails, cleanup, planting, and habitat restoration.

CONSERVANCY NEWS

We are a non-profit 501(c)(3) organization dedicated to saving nature areas in the Spokane region for public enjoyment and education. Call Michael Hamilton, 747-8147, if you have questions. Our board meets every month on the third Tuesday. Our next meeting will be on March, 19th, 7 pm. We meet at the Moran Prairie Spokane County Library, 6004 South Regal St. Visitors are always welcomed.

The following are our January donors that have consented to be listed: Paula Bauer, Nancy Cashion, Joseph Collins, Marilyn DeCoster, John Douglas, Paul Grubb, Lindell Haggin, Michael & Claudia Hamilton, Lois Hansen, The Hobnailers, Carolyn & Edwin Holmes, Kae Johnson, Janyce Keeling, Patrick Killien, Cynthia Langlois, Robert Larned, Esther Larsen, Mary Lentz, Carol Lewis, Lawrence Main, Margie Middendorf, Stan Miller, L.R. Montgomery, Spokane Mountaineers, Gale Mueller, Justin Murphy, Vick Myers-Canfield, Steve Reynolds, Jayne Singleton, Lee Smith, Susan Strong, Landa Vierra, Peter & Gay Witherspoon, and one anonymous donor. Thank you all for making the start of the year a success!

YES, I want to help protect our natural areas in the Spokane Region

Enclosed is my tax-deductable donation of :

\$ 15* \$ 25 \$ 50 \$ 100 Other _____ * annual dues, due by June 30

Gift is a Memorial for: _____

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Please return this form along with your check payable to: Dishman Hills Conservancy

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