

## Montana's Fossil Forest Journey by Robyn Klein

*From Kelseya, Spring 2008*

Close your eyes and envision a primeval jungle of amethyst pine, yew, laurel and Hayden's sycamore. Breathe in the fragrance of aromatic bay and magnolia flowers. Marvel at Felix's buckthorn and Lamar oak. Imagine a lush undergrowth of ferns like the fine chain fern, a wide array of *asplenium* species and *Lygodium*, a climbing fern, along with the ever tenacious horsetails. A large grass species, *Phragmites*, waves in the warm breeze. Sedges and *Musophyllum*, an exotic banana- looking plant, enjoy the wetter parts of this forest. Here too, grow trees that offer nourishment such as walnut, hickory, hazelnut, beechnut, fig, breadfruit, cinnamon, grape, and even persimmon. Basswood and bayberry flourish here as well, along with acacias and a very different kind of soapberry, a shrub, *Sapindus*.

Suddenly, a rumble is heard and the ground shivers. The skies blacken and in the distance a volcano explodes, spewing into the air a pyroclastic flow of ash, hot mud and andesitic lava. The beautiful, living forest is quickly drowned in fire and mud. As time passes, silica-rich ground water slowly infiltrates the woody layers of the buried timber transforming these denizens of the Northern Rocky Mountains into petrified replicas, testament to the Eocene Epoch some 35 to 55 million years ago.

Today we walk this region, now known as the Absaroka Volcanic deposit, and discover the ancestors of still other species present at that time: poplars, willows, birches, maples, sumacs, buckthorns, aralias, and dogwoods. Even the rare bittersweet vine can still be found in Eastern Montana. The Valley of Flowers Chapter chose *Sequoia magnifica*, the Magnificent Redwood, a tree very similar to today's California coastal redwood, as our logo for the 2008 annual meeting. Our chapter is looking forward to guiding you on a trail that will reward us with a

view of petrified redwood giants, most of them still standing. In fact, this is what makes this Petrified Forest particularly unique as such cataclysmic action usually topples the trees and they are found lying on their side. We hope you will join us for an unusual journey to the past: Montana's fossil forest.

Please be sure to check off the box on the registration form if you are thinking of hiking the Specimen Creek trail as we can plan for a second group if the numbers warrant. If time permits, the group hiking to the petrified forest within Yellowstone Park will stop on the way back to camp, to prospect for petrified wood chips at a spot on the Gallatin National Forest. As this site is probably in a creek, bring appropriate footwear.