

E pluribus unum from the Douglas fir

“Pine trees have earned the reputation of being ‘evergreen’ by the same device that governments use to achieve the appearance of perpetuity: overlapping terms of office.” Although it’s not a pine tree, Aldo Leopold’s remark includes conifers like the Douglas fir. Common at middle and upper elevations of the intermountain west, Douglas firs let old needles fall after new needles have grown in. So we are able to enjoy the green through the winter, and in a timeless way, these trees endure season to season, age to age.

These trees go by various names: Dougfir, Douglas spruce, red fir, or simply called fir (which botanists clearly state is incorrect).

Naturalist David Douglas arrived at Fort Vancouver in the Pacific Northwest in 1825 with the Hudson’s Bay Company to study flora and fauna of the region. Fanning out from what today is the Portland area, his quest was to find species throughout the northwest over several years.

He amassed more than 500 plant specimens which were new to science. He gave his name to one which grows in gigantic fashion along the Pacific coast; but before I go further, let me throw a couple pieces of Dougfir into the woodstove. Then let’s look at why this tree persists on our landscape.

Fossil evidence of these trees takes us back some 135 million years

into the Cretaceous Period, when dinosaurs like triceratops and tyrannosaurus rex roamed the landscape. About that time, the Douglas fir began to genetically split from most of the trees in the pine family. Biologists have trouble tracking down the story

because the trail of fossils goes cold until some 80 million years later. As the glaciers began to recede, this hallmark of the American northwest became dominant in forests of western North



PHOTO COURTESY OF NATIONAL PARK SERVICE

A long-dead Douglas fir tree stands near Lytle Point at Black Canyon looking over living trees descending into the canyon.

America.

Second in height only to the coastal redwood trees, its girth and overall size have made it an economic workhorse of the western states.

Rain and snowfall is stingy in the Rockies (compared to its home in coastal states), and populations here have had to adapt. Striking a bargain with soil fungi on the forest floor gives the tree a chance to survive fairly well against odds that would be difficult otherwise.

The fungal bodies grow as long filaments or strands a little below the soil surface. They coil and wrap like elongated threads, similar to a mass of unruly or seriously messed-up lock of hair.

The fungus lives off of rotting matter on the forest floor, absorbing the nutrients. The fungus can’t make its own sugars and starches, so these intertwined filaments wind around the roots of a plant that can make its own carbohydrates through photosynthesis. The Douglas fir can provide such roots as the fungal filaments wind around and even enter minuscule spaces between the root cells.

The roots are transformed, becoming part fungus-part tree. Although the fungus lives off of the tree, the new roots are more efficient at taking up water from the soil along with important minerals like phosphorus and nitrogen.

This partnership provides significant help to guard the tree against periods of drought which

occur in cycles in the Four Corners states.

These conifers thrive best on north-facing slopes where moisture from rain and melting snow lingers longer in the soil. Such a combination of root adaptations and growth on the shadier sides of mountains and canyons has helped the trees to maintain their populations even throughout harsh and difficult conditions.

The Douglas fir trees in the Rocky Mountains tend to be slower growing, but might also realize longer lives. The Laboratory of Tree Ring Research at the University of Arizona has searched through the region, finding that while many examples attain 500 years of age, grandparent trees have reached more than 800 years.

Of course, the tree has

provided important economic benefits even as it endures against warm and dry conditions.

One overlooked role that conifers like these provide is an important source of heat for businesses and homes. Wood cutters disagree over their preferences for firewood, but at our house we spend part of each summer hunting for dead and down Douglas-firs, bucking them up and bringing them home. It is our preferred wood-of-choice to stoke in the woodstove on late autumn nights with great knowledge of the forest from which the wood was gathered.

Leopold capitalized on that personal relationship with trees.

Each of the conifers follows its own constitution; incoming needles arriving in certain months while outgoing

needles drop off later. The departing needles of the Douglas fir, living at the mid-elevations of Black Canyon, for instance, fall in September.

As the browns and tans of the November landscape give way to whites, grays and shadows of winter, our eyes will strain for any color to be found.

There, we can find the comforting green of the Douglas fir trees, dusted with snow. The beauty is not only in the one, but of the many as out of countless trees, comes the entire forest. And even as they stand straight, continuing for millennia, we can be resolute to endure as well.

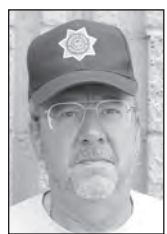
Paul Zaenger has been a supervisory park ranger at Black Canyon of the Gunnison National Park since 1993. Other park assignments include Mount Rushmore National Memorial and Glen Canyon National Recreation Area.



Paul Zaenger

Outdoors

So, who is going to pay for this?



Mark Rackay

Tips from the Posse

The two elk hunters decided to split up and each walk on separate sides of the ridge. Later, they were to meet at the other end and walk back to camp together.

It did not turn out that way.

As one hunter made it to the rendezvous point, snow was beginning to fall. The second hunter, now hours overdue was in grave danger. Why didn’t the first hunter call for help?

He waited to call because he was afraid of the cost he and his partner would have to bear for an all out search and rescue operation.

Fortunately, he finally did make the call and the Montrose County Sheriff’s Posse did respond. The lost hunter was found. He suffered from hypothermia and frostbite. Had his hunting buddy called for help earlier, it might have prevented those injuries.

In 1987 the Colorado Search and Rescue Board, our state’s organization of SAR teams, stated it opposed requests made for reimbursement for anything except “actual extraordinary expenses” incurred while coming to the aid of someone in distress.

The Colorado SAR community has gone so far as to state it “will actively oppose and disassociate themselves from any effort to enforce collection of expenses from a victim or his family.”

Citizens who enjoy Colorado’s outdoors organized themselves as specially trained SAR teams and began performing rescues and searches in Colorado in

1946. There was no one else to do it.

Today our state’s nearly 60 SAR units provide this service to residents and visitors and still ask for no compensation. When SAR teams are called and carry out the mission they will not bill the victim, local government or taxpayers.

In order to offset some of the expenses, the Colorado Search and Rescue Fund was created for the purpose of reimbursing political subdivisions and search and rescue organizations for expenses incurred in conducting search and rescue operations within the State of Colorado.

If you purchase fishing or hunting licenses, a stand-alone Colorado Wildlife Habitat Stamp, or register an off-highway vehicle, boat or snowmobile, you automatically contribute to the fund.

Another way to contribute to the fund is by purchasing a Colorado Outdoor Recreation Search and Rescue Card.

The Colorado Outdoor Recreation Search and Rescue (CORSAR) Card is for hikers, campers, climbers and other outdoors users, or those who work in the backcountry.

It costs just a few dollars and goes a long way in helping Search and Rescue Teams recover some of their cost. Remember, this card is not an insurance policy.

If you would like more information about a CORSAR card visit the fund’s website at: <http://www.dola.colorado.gov/sar/>.

In the meantime, enjoy the outdoors knowing that someone is there to help in the event disaster strikes. See you on the trail.

Mark Rackay is a freelance writer who serves as a director for the Montrose County Sheriff’s Posse. For information, call 970-252-4033 (leave a message) or email info@mcspl.org.

Ski terrain expanding at Crested Butte Mountain Resort

Crested Butte Mountain Resort plans to open 40 new acres of expert terrain this winter season, called Teo 2, once the area has ample snowpack. Located skiers’ right beyond Teocalli Bowl at the top of the High Lift, Teo 2 stands above future expansion possibilities at the resort on the back side of the mountain and delivers a variety of terrain for advanced skiers and riders.

“Teo 2 has been in our existing permit boundary for years, but we needed to provide emergency access

and egress to open the terrain to the public, which was cut this summer,” John Sale, the resort’s director of planning said in a news release.

“Once out there, the vistas from the top of Teo 2 open up a whole other part of the mountain on the back side with amazing views of Teocalli Mountain and the East River below. This will give guests a preview of the future expansion potential as outlined in CBMR’s 2013 Master Development Plan.”

An area that is hoped

to be expanded into in future years once the proper permitting takes place, Teocalli Drainage would include two additional lifts and intermediate terrain, creating an entirely new skiable lift pod for most skiing and riding abilities, with pristine views of wilderness areas and U.S. National Forest.

Announcements will be made about exactly when Teo 2 is going to open later this winter as the snow accumulates and the snow safety team gets back to the new area to control it.

IN BRIEF

Migration routes of big game mapped in Wyoming

CASPER, Wyo. (AP) — Wildlife researchers for the first time have mapped migration routes for five of Wyoming’s big-game species.

The Casper Star-Tribune reports the team, which includes researchers at the University of Wyoming and cartographers at the University of Oregon, studied the migration of elk, mule deer, moose, bighorn sheep and pronghorn. Much of the research focused on migratory routes in and around Yellowstone and Grand Teton national parks in northwest Wyoming.

Crew finds 150-ton boulder likely left by glacier

EVERETT, Wash. (AP) — Workers digging an underground garage for a new hotel in Everett, Washington, recently struck something big about 30 feet below the surface.

This week they uncovered it — a boulder that’s thousands of years old and bigger than an SUV, weighing an estimated 150 tons.

A geotechnical engineer who was called out to examine it, Kurt Merriam, told The Daily Herald it’s a glacial erratic — a giant rock left behind by a glacier maybe 18,000 years ago.