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TREE FARM BULLETIN

Come join us in northern New Mexico for some high elevation fun for the 2015 Spring Tree Farm Field Day!

Located 5 miles north of Chama, NM on State Highway 17 this year's kick off to summer is <u>Rancho del Oso</u> <u>Pardo</u> (RDOP). Roughly translated "Brown Bear Ranch", though no true Brown Bears (aka Grizzly Bears) exist in the southwest, we have plenty of brown or cinnamon - Black Bears in the area.



"RDOP was originally part of the T.A. Land Grant; [this] area was divided into several ranches. The present owners have, over time, bought ranches or portions thereof to create the ranch of today. The ranch is primarily a recreational area for owners and guests. [Past] grazing and logging...was done with little concern for best management practices or ecosystem functions. At this time, the owners, being concerned and conscientious land stewards, are interested in rectifying some of these past land abuses, restoring a more ecologically balanced land base and preventing any catastrophic wildfire or damage to the Chama River watershed..." –Excerpt from RDOP Forest Management Plan; Gary Harris, Forestry Services of Chama



Certified a Tree Farm in 2014, RDOP straddles the New Mexico/Colorado state line with 5,522 acres on the New Mexico side and the remaining 11,071 acres in Colorado. Low areas start at 8,300 feet and rise above timberline at over 11,000 feet in elevation. This area has a history of high grade logging and overgrazing by sheep and cattle associated with the lifestyle at the time. The southern spur of the Denver and Rio Grande Railroad came down from Alamosa Colorado through Chama and northwest to Durango. This brought about the demand for timber for home



building, the railroad, and for the local coal mines as support timbers in the mine shafts. Ranchers utilized this transportation resource to deliver livestock to various markets outside the area. The Cumbres and Toltec Scenic Railroad, a remnant of that long lost spur, travels through RDOP today carrying tourists and train enthusiasts from all over.



Taking a cue from past management, RDOP has developed forest management strategies in the mixed conifer and aspen forest types that complement the

landscape. Ever evolving and adapting to changing conditions and seasons, several practices will be seen during the site tours. Information sharing is the key to drawing you up to Chama, and is the primary goal of the ranch manager in hosting the 2015 Spring Tree Farm Field Day.

Agenda as with forest management in northern New Mexico is subject to change based on weather, but here is as close as we can get. There is also the phenomenon called "Chama Time", but if you are hard pressed, just let us know ahead of time and we can accommodate a timely departure if needed. Come prepared for cold weather, wind, mud, or just some wonderful warm sunshine!!

Saturday, April 25, 2015

10:00	AM	Visitor sign in, Welcome, & Introductions – RDOP Headquarters.
10:30/10:45	5 AM	Ranch presentation on high elevation management strategies, landscape management across fences, and field site overview.
11:15/11:30) AM	Depart for field visits (transportation will be provided by RDOP and NMSF via 4x4 vehicles).
12:30'ish	PM	Lunch / NM Tree Farm Committee presentation (lunch provided by NM Tree Farm Committee prepared by RDOP; there will be shelter and outhouse available).
1:15	PM	Continue to the next two field sites.
2:00/2:30	PM	End of Tour: Begin return to RDOP headquarters for departure.

Please RSVP by <u>**THURSDAY April 16, 2015**</u> so we can get an accurate head count for lunches and to ensure that we have sufficient transportation available.

Contact Jose Carrillo, Chama District Timber Management Officer via e-mail at <u>jose.carrillo@state.nm.us</u> or call (575) 588-7831. The more the merrier, the earlier the better!





From the south: Take U.S. Highway 84/285 north from Santa Fe, continue to Espanola, and take a left on Paseo de Onate (84/285). Travel 80 miles north of Espanola along U.S. 84; continue north on NM 17 through Chama for 6.7 miles from the junction (Giant gas station). Gate will be on the left with a lighted road sign indicating "Tree Farm Field Day".

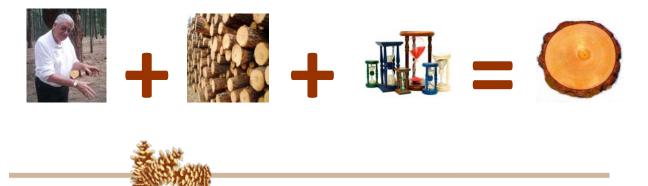
From the east: From Taos, NM take U.S. 64 to Tierra Amarilla (80 miles), take a right to go north on what is now U.S. 64/84 to Chama (14 miles), continue north on NM 17 through Chama for 6.7 miles from the junction (Giant gas station). Gate will be on the left with a lighted road sign indicating "Tree Farm Field Day".

From the west: From Farmington take U.S. 64 east for 111 miles, take a right at the junction and continue north on NM 17 through Chama for 6.7 miles from the junction (Giant gas station). Gate will be on the left with a lighted road sign indicating "Tree Farm Field Day".





FROM THE CHAIRMAN: Please plan on joining us for the first field day of the year. It sounds as if Joe Carrillo and the Chama District have set up a wonderful program that will be educational and interesting to all. We realize the drive may be a bit long, but it will be well worth it. We will raffle off one of George Duda's magnificent tree cookies to those attending (see below, George Duda + Round Wood + Time = Tree Cookie).



What is a Tree Cookie?

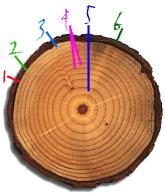
They're round. They're full of fiber. But unless you're a termite, you can't eat tree cookies!

Tree cookies are cross sections of tree trunks that foresters and teachers use to illustrate how trees grow. Tree cookies reveal the many different layers that make up a tree. And each layer can tell us something about the tree's life and the climate in which it grew.

Item 1 is called the **cambium**. It is a layer or zone of cells, just one cell thick, inside the inner bark. The cambium produces both the **xylem** and **phloem** cells. This is where diameter growth occurs, and where rings and inner bark are formed.

Item 2 is the **phloem** or inner bark. This layer carries sugar made in the leaves or needles down to the branches trunks and roots, where it is converted into the food the tree needs for growth.

Item 3 is the **xylem** or sapwood. This layer carries the sap (water plus nitrogen and mineral nutrients) back up from the roots to the leaves. Sapwood gives a tree its strength.



Item 4 is a **growth ring**. The lighter portion is called the "early wood" (because it grows in the spring), and the darker portion the "late wood" (which grows in the summer). Together, they represent one year of growth. (You can count the rings to see how old a tree is!)

Item 5 is the **heartwood**. Heartwood develops as a tree gets older. It is old sapwood that no longer carries sap, and gives the trunk support and stiffness. In many kinds of trees, heartwood is a darker color than sapwood, since its water-carrying tubes get clogged up. The tree cookie at right, like many of its fellow young pines, has not developed heartwood yet.

Layer 6 is the **outer bark**. This layer protects a tree from insects and disease, excessive heat and cold, and other injuries.

The rings of a tree give us a lot of information about the age of the tree, its health, and the climate conditions during each year of its growth. Just for fun, predict the number of rings on each of the tree cookies on this page. They are about the same size, but are they of the same age? Count the rings and find out. How might you account for the differences?



(HINT: Think about all the things a tree needs in order to grow.)

Stumped? Here are some explanations to help you think about it: The first tree cookie shown has a small number of wide rings, indicating that it came from a young tree that grew in an area where it had little competition for the things a tree needs to grow -- such as sunlight, water, and nutrients.

The second cookie (left) has many tight rings. It is from an older tree that grew with more competition.

The fact that the center rings are offset indicates that the tree either grew on a slope or had to grow around some sort of obstruction. (Idaho Forest Products Commission)

