



NEW MEXICO TREE FARM NEWS



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Ruddock's 2006 New Mexico Tree Farmers of the Year
Nick Smokovitch,
EMNRD – Forestry Division, Socorro

The American Tree Farm System has always been a “sign” of landowners who have the vision and commitment to practice the high ideals of stewardship of the land. I applaud all landowners everywhere, who conduct the management activities on their property as caretaker of our forested land of the future.

Once a year the New Mexico Tree Farm Program committee recognizes the accomplishments of one Tree Farmer of the Year, based on the nomination of the inspecting forester. That TFY application is then sent to the western regional competitions and if selected there has a chance at the National Outstanding Tree Farm of the Year! You may have seen articles about those select few in the Tree Farmer magazine.



John and Karen Ruddock, New Mexico's 2006 Tree Farmer's of the Year at the Tree Farm near Quemado, New Mexico.

For 2006 John Ruddock was chosen as the NM Tree Farmer of the Year! As the forester that nominated Mr. Ruddock I would like to explain why he stands out. First, even before any funding was available to do thinning Mr. Ruddock was cutting one his own, following the advice in his Forest Stewardship plan. Soon the realization that there are more trees than I can cut! And, what will we do with all the wood? As a remedy Mr. Ruddock contacted John Chavez, a local wood cutter from Quemado, who could use some of those trees as vigas and latillas. After some work it was apparent that these woods had potential if enough was thinned.

Second, Mr. Ruddock saw were he wanted to get with his land and pursued opportunities to get funding from the state. He is currently working on his third thinning project in 2007.





Ponderosa pine stand on the Ruddock Tree Farm in the process of being thinned.



White Rock Lake.

Selling Forest Products

Harry Morrison, Chair, New Mexico Tree Farm System & Forestry Consultant & Lumber Mill Operator



Ponderosa pine stand on the Ruddock Tree Farm after thinning and slash treatment.

Last March I was invited by Colorado State Forestry to give a talk to forest landowners in Buena Vista on determining value of forest products and setting up a sale. Landowners in Colorado face a similar situation as New Mexico landowners do. Forest improvement many times means you are cutting trees and as any landowner who has cut their trees can attest its not long before you end up with more wood than you can possibly burn as firewood or give away to friends and neighbors. If this woody material can be removed as a product it can help pay for the improvement of the forest and by removing excess material it makes additional work more feasible.

Landowners should think small when selling products. We have no large scale sawmills or other wood product operations in this area so even if you are selling sawlogs (larger diameter trees) you should think of a small scale operation. Small scale means up to about 250,000 b.f. (roughly 25 log truck loads). Sawlogs have always been the highest value product that a landowner can sell. Other products (firewood, latillas, Christmas trees,

Third, when the opportunity to burn thinned material become difficult, John want ahead and purchased a chipper so that the work can continue to go on. It is commitment to keep doing the work needed and not the capital out lay that deserves the attention.

Sure there has been speed bumps along the way, be as long as Mr. Ruddock is willing to see it through, I will be glad lend a helping hand.





posts) often have little monetary value but from a forest improvement standpoint are from small trees which are often most in need of cutting. Anyone removing these products from the woods is operating on a small scale so once again think small.

How to find a buyer? This can be a real challenge. If you have neighbors who have sold wood products they may be able to help you. Go to the phone book and look under sawmills or firewood to see if there are any listings in your area. Call them to see if they will come out and look at your property and look at your woods. They should be able to tell you if you have something to sell.

When you do find a buyer be aware that there are state regulations that need to be followed when harvesting products. A permit may be required. State regulations are designed to protect soil and water and are not hard to follow. Be sure your buyer is aware of the regulations.

New Mexico State Forestry has foresters on each district with years of experience in dealing with forest product sales and, as well as enforcing regulations, are there to offer advice to the landowner. They also have a list of qualified professional foresters that can act on the landowners behalf when selling products.

Selling products should be about more than just monetary value. A well planned sale can improve soil and water, improve wildlife habitat, and increase the value of your land. It can also be very rewarding to see how nature responds to your efforts.

Defensible Space

**Joe Stehling – Tree Farmer &
Master Gardner – Angel Fire, NM**

The Interagency Southwest Coordination Center in Albuquerque reports the outlook for significant fires this 2007 season is normal to below normal across the state. However, recent weather reports have been all over the map. We have a wet period

and fire danger is lowered. The wind blows and we have a dry period and the fire danger is raised. Now is the time to get prepared regardless of the forecasts.

To protect your property from a wildland fire, the Firewise community has developed the concept of Defensible Space. The basic concept is to thin dense stands of trees and remove ladder fuel which consists of dead and downed ground debris and the lower branches of trees. Ladder fuel is combustible material that will allow a relatively controllable ground fire to be carried up into a difficult to control crown fire.

What is defensible space?

Zone 1: Up to 75 feet from a structure. No flammable vegetation within 25 feet of any structure. Trees and shrubs up to 15 feet from the structure thinned with crowns of trees a minimum of 15 feet apart. Lower branches of trees should be removed to a height of 10 feet above the ground. This is to inhibit a low level ground fire from progressing up into the crown of the trees creating the most dangerous of fires – a crown fire.

Zone 2: 75 to 125 feet from structure depending on aspect and slope of the terrain. Trees thinned so crowns are no closer than 10 feet. Crowns can get closer as you get farther from a structure. A grouping of trees may be left in place with the crown measurement being taken from the outermost branches of the group to the next tree or group of trees. All ground debris must be removed and lower tree limbs removed up to a height of 10 feet.

Zone 3: Remaining area to property boundary. Remove downed trees and debris. Thin to promote forest health. A rule of thumb is one should be able to





drive a pickup through the trees. Again clumps of trees may be left as long as they are not too closely spaced so competition for moisture will inhibit growth. Snags, a pile of brush here and there, and a couple of downed large diameter trees may be left for wildlife habitat as long as they are not against live trees and do not provide ladder fuel.

Those property owners who do not have structures, your efforts should be directed at cleaning up deadfall and ground debris and work at thinning, and removing low hanging branches.

Thinning should concentrate first on dead and diseased trees, although a couple of dead trees may be left per acre to serve as snags for wildlife habitat. The objective of thinning is to prevent a crown fire from progressing and to reduce competition for moisture in the soil. This will provide for healthy trees that can ward off pests such as the bark beetle.

Pruning Techniques **Joe Stehling – Tree Farmer &** **Master Gardner – Angel Fire, NM**

Now that spring has sprung, in anticipation of a new wildfire season, it is time to start cleaning up your properties of the dead and downed combustible material. In conjunction with this clean up remove any material that will allow a ground fire to move from the ground up into a devastating crown fire. This material, called ladder fuel, consists of dead and downed ground debris and the lower branches of trees. Ladder fuel is combustible material that will allow a relatively controllable ground fire to be carried up into a difficult to control tree-top crown fire. Tree branches should be removed up to about ten feet above the ground. Recent weather reports have been all over the map. We have a wet period and fire danger is lowered. The wind blows and we have a dry period and the fire

danger is raised. Now is the time to get prepared regardless of the forecasts.

Whether you are a homeowner with a small plot of land, or a tree farmer with many acres, you can mitigate the potential for wildfire by creating defensible space around your structures and throughout the property. One aspect of creating defensible space is to reduce the ladder fuel. Besides thinning of the closely spaced trees so crowns do not touch, clearing the dead and downed combustible material and pruning leave trees up to approximately 10 feet from the ground will allow a ground fire to pass through without moving into the crowns.

In this article I would like to focus on proper pruning techniques. There are many reasons to prune living trees - for tree health, defensible space, and aesthetics. As outlined in New Mexico State University Guide H-156, *Tree Pruning Techniques*, pruning should be done whenever there are dead or diseased branches, sprouts forming at the base of the trunk, branches growing toward or across the tree's center, crossed limbs that rub together or may rub in the future, V-shaped crotches (when possible to prune), multiple leaders (upright branches that compete as secondary trunks or may develop into additional trunks), and nuisance growth (interfering with power lines, sidewalks, buildings, traffic or traffic visibility.)

Pruning of deciduous trees should be done during the dormant season. Evergreen trees ideally should be pruned late in the dormant season just as new growth is starting. Pruning will actually stimulate new growth. Since new growth will have begun by the time you read this article, drastic pruning should not be done at this time. Dead and diseased and crossing branches should be pruned as they are identified. Lower branch pruning for defensible space, up to about 10 feet can be done now without any danger of harming the tree. Regardless of when you prune no more than 25 percent of the tree's material should be removed at any one time.





The following techniques should be used when pruning to assure tree health.

- No flush cuts. Tree limbs should be cut at the slight flaring of the limb from the trunk. This flared section is called the branch collar or branch bark ridge. Cutting the limb at the branch bark ridge will allow the tree's natural defense mechanism to grow the branch collar around the wound. The branch collar contains the vascular tissues from both the branch and the trunk. If you cut into the trunk tissue, you will interfere with the tree's natural protective mechanisms, allowing entry of disease and insects which damage the tree trunk.
- No Pruning Sealer. Using a so-called pruning sealer will neither help the wound heal nor keep insects out of the wound. Quite the contrary, the pruning-healing compound will inhibit the tree's self defense mechanism from healing the wound and provide cover for insects that bore through the covering. It is a good idea to periodically clean pruning tools with an alcohol solution to prevent the spread of disease.
- Repair of Mechanical Damage. The area of the tree that has been damaged should be carefully trimmed to remove ragged areas and to eliminate areas where water can pool in the wound. Rot can start at the wound and eventually kill the tree. A neatly trimmed wound will allow the tree to protect the wound from invasion by "walling off" (compartmentalizing) the injured area.
- Small Tree and Shrub Trimming. When trimming small trees and shrubs, no more than 25 percent of branches should be removed at any one time.

- Large limb pruning. Pruning large limbs should be done in three steps to avoid stripping bark from the trunk. The first step is to make a cut about 1/4 to 1/3 of the way through the branch on the underside of the branch about six inches beyond the branch collar. The second step is to cut the branch from the top several inches farther out than the undercut until the branch falls. The third step is to cut should be made at the branch collar to remove the stub.
- Topping. Topping of a tree or cutting off the ends of branches should not be done. Topped trees have shortened life spans and can pose a safety hazard as the branches are weakened from the topping.

For more information: [New Mexico State University Guide H-156, Tree Pruning Techniques](#), September 2005.

Carbon Aggregation – A Letter from Bob Simpson, Senior Vice-President - ATFS

As many of you are aware, the carbon trading issue is gaining momentum in the U.S. Already congressional leaders and committees are trying there hand at "cap and trade" legislation. Last week, the Senate Energy and Natural Resources Committee held a roundtable meeting with European executives, officials and consultants to figure out how the US may adapt Europe's system while avoiding the pitfalls.

Needless to say, in many ways the carbon trading is taking on a gold rush appearance. Groups are springing up daily trying to find ways where they can be the first to enter the system and stake there claim. One of the most attractive sources of tradable carbon out there today is the American Tree Farm System. From what we understand at this point, ATFS is one of the largest single sources of potentially tradable carbon in the





US. Currently, the only forest carbon eligible for trading in the US must come from a recognized certified source. ATFS is one of only three sources.

With this in mind, we are writing to put you on notice that undoubtedly in the near future your Tree Farm committee may be approached to join one of these new ventures. We caution you against such an action. For those of you who attended this year's National Leadership Conference, the message to the national program support office was to move with all possible speed to securely position ATFS and its stakeholders in the carbon trading arena. Through American Forest Foundation, we are working on a concept to establish certified Tree Farms as a creditable and sought-after source of tradable carbon, and position our stakeholders/co-sponsors as exclusive aggregators and traders. Prematurely giving an organization access to your Tree Farm database may severely jeopardize their future participation in carbon trading and reduce the revenue stream that might have been generated to the ATFS stakeholder aggregator.

If you are approached by any organization other than ATFS, please notify us immediately, and has been our policy regarding Tree Farmer Privacy, do not relinquish your database.

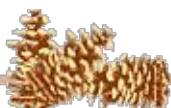
We will continue to keep you frequently updated on our progress. Be looking for another communication in the near future that will give greater detail on our concept of aggregating and trading carbon.

Thanks for all your hard work and commitment to America's family owned forests.

Ecosystem Services – A Primer for New Mexico Tree Farmers
John Harrington – Professor, NMSU – Mora Research Center, Consulting Forester & Editor of the New Mexico Tree Farm Newsletter

The concept of *ecosystem services* or managing for ecosystem services is one of the most important recent trends in natural resource conservation today. The term ecosystem services is a human centric term that describes the benefits obtained by people from ecosystems. In many instances these services are viewed as economic benefits and form the basis or incentive for market-based conservation. The rationale behind this assumption is if a value, usually an economic value, can be assigned to these ecosystem services, then this value will provide an incentive for conservation. However, not all ecosystem services have been or can be assigned a "value." This let's examine what is exactly meant by "ecosystem services."

Ecosystem services have been broken down into four main categories: provisioning, regulating, cultural and supporting services. Services can be both tangible (e.g. wood, nuts, berries, etc.) or intangible (i.e. water filtration, the spiritual feeling of "oneness" when in or viewing an ecosystem, etc.). Some services lend themselves to measurement easily (e.g. board feet, tons of fish) others less so (e.g. pounds of pollutants removed or tons of carbon sequestered). While other services only proxy measures can be used (e.g. aesthetic values). This categorization of ecosystem services, based on human expectations, unfortunately may imply independence among the services. All components, biotic or abiotic, contribute to some extent, to each service provided. Hence the importance of ecosystem services needs to be placed on the entirety of the ecosystem.



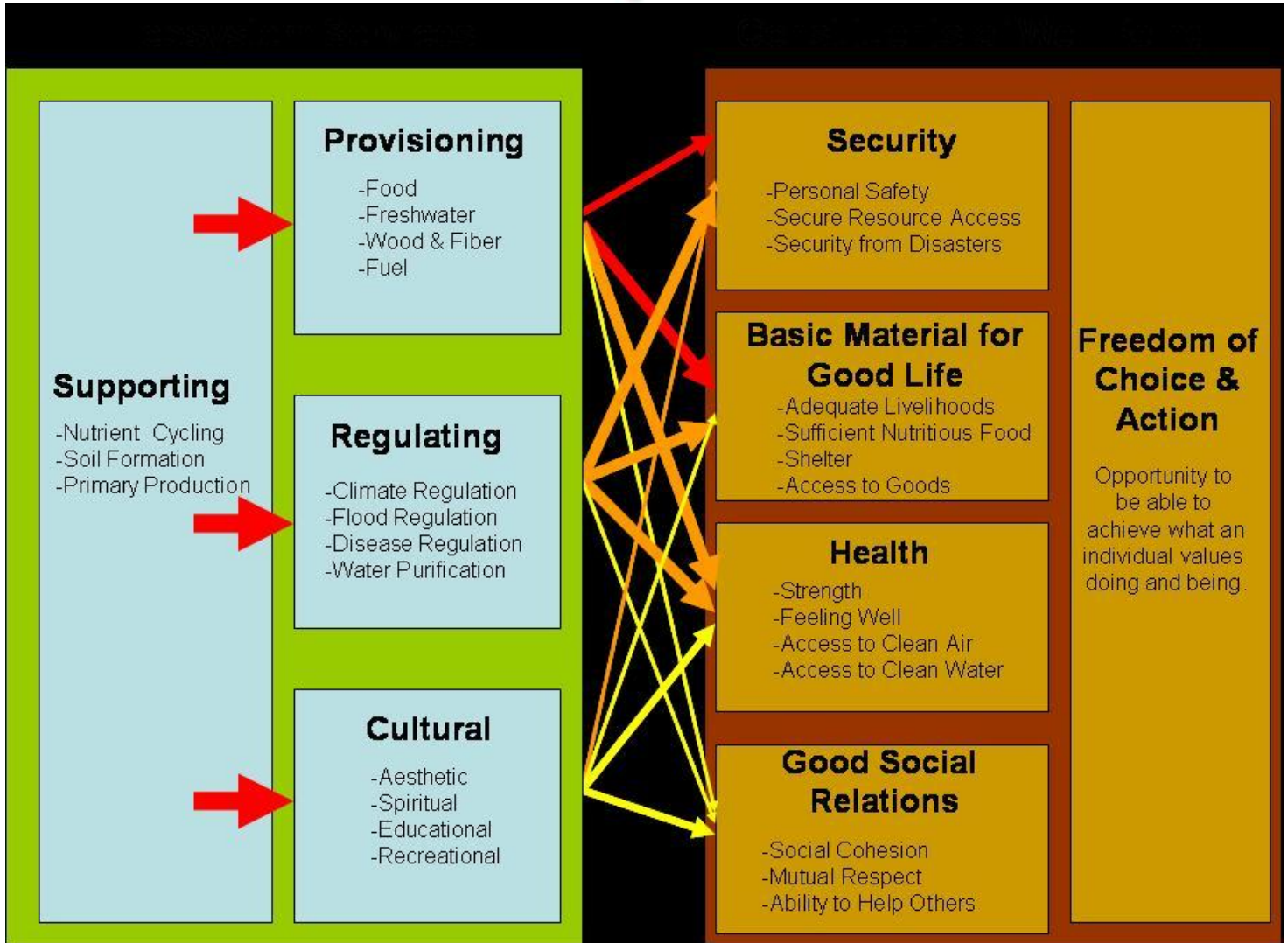


Figure 1. Types and relationships of ecosystem services and constituents of well-being. Arrow thickness indicates intensity of linkage between ecosystem services and human well being with thicker arrows having greater intensity. Arrow color indicates potential for mediation by socioeconomic factors with red is being high, orange being medium and yellow being low. Illustration adapted from Millennium Ecosystem Assessment.

Provisioning services are products obtained from ecosystems, including genetic resources, food and fiber, and fresh water. Saw logs, Christmas trees, livestock and wildlife are examples of provisioning services generated on New Mexico Tree Farms. *The capacity of ecosystems to provide provisioning services in the future is jeopardized when services are used more quickly than they can be renewed, in other words if the resources are managed unsustainably.*

Regulating services are the benefits obtained from the regulation of ecosystem processes, including regulation of climate, water, and some human diseases. Photosynthesis is an example of a regulating service. Trees take up carbon dioxide from the air and combine it with water using energy from the sun to make sugars. These sugars in turn are used to build cells and tissues as well as provide energy. Regulating services have been taken for granted by societies including today's





societies. *The ability of an ecosystem to provide regulating services at expected or historic rates, can be jeopardized if the ecosystem is disrupted (e.g. stand replacing fires) or overwhelmed (e.g. nitrate loading in an aquifer).*

Cultural services are the non-material benefits people obtain from ecosystems through spiritual enrichment, cognitive development, reflection, recreation, and aesthetic experiences. As example of cultural services are those New Mexico Tree Farmers who purchased their Tree Farms for the solitude the forests and woodlands provide. A sense of getting away from the drudgery of day-to-day life is an example of a cultural service their Tree Farm is providing. For other Tree Farmers, it may be a sense of producing trees or lumber that they obtain from managing their Tree Farm. *The ability of an ecosystem to provide cultural services, such as a view shed, can be jeopardized by habitat fragmentation or urban sprawl.*

Supporting services are ecosystem services that are necessary for the production of all other ecosystem services. Some examples include biomass production, production of atmospheric oxygen, soil formation and retention, nutrient cycling, water cycling, and provisioning of habitat. Land management practices need to be based on their impacts on supporting services. *Think of you Tree Farm as an investment and the supporting services as the capitol portion of the investment and the other three types of ecosystem services as the interest accrued on the capitol investment. Would it be wise to spend your capitol or is better to live off the interest?*

Some Recent Trends in U.S. Forest & Range Lands

John Harrington –Professor, NMSU – Mora Research Center, Consulting Forester & Carol Bada – EMNRD – Forestry Division - Las Vegas

- Forests cover one-third of the total land area (roughly 750 million acres or 2.5 acres per person);
- Total forest land area has been relatively stable for the past century (still less than the 1050 million acres prior to 1630);
- Globalization, structural change, and consolidation continue to affect U.S. forests and rangelands (roughly 30% of the Nation's consumption of forest products was imported up from 18% in 1980);
- Water withdraws have leveled off (roughly 53% of the Nation's water supply originates on forest land);
- The number of family forest owners is increasing and area of forest land in smaller tracts is increasing (there are an estimated 10.3 million family forest owners *(including you folks)* who own roughly 42% of the Nation's forest land) however; 90% of these owners live in the eastern United States.
- Growth in many recreation activities outpaces the growth in population (while the number of people aged 12 and older increased 75% since 1960, the number people participating in cycling, kayaking, camping or snow skiing increased several fold (300 +%)).

We will be presenting more of these trends in upcoming issues, but if you want to learn more these trends were obtained from: [Assessment of the Status and Trends of Natural Resources from the U.S. Forest and Range Lands – 15 Key Findings.](#) USDA Forest Service FS-875 March 2007.





New Mexico Tree Farm News is co-sponsored by:

- American Forest Foundation
- Energy, Minerals and Natural Resources Department – Forestry Division
- New Mexico State University – Mora Research Center

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New Mexico Tree Farm News is published once or twice a year, depending on funds. Distribution includes over 150 Tree Farmers throughout New Mexico along with over 50 forest product producers. If you would like to advertise your Tree Farm, your products, or your company, please send us the information and we will be glad to include it in the next newsletter.

Dear New Mexico Tree Farmers:

Hey folks, sorry about the long interval between issues. I have been on sabbatical leave with the US Forest Service- Policy Analysis Group in Washington DC since late last summer. It has been a great appointment and I think they enjoyed having an “outsider’s” viewpoint. For the remainder of 2007 I will continue my work with the Forest Service as well as resume my responsibilities here in New Mexico. One of the greatest contributions was I was able to bring to this effort was a “reality

check” that has evolved throughout my career working forest and ranch land owners and Tree Farmers such as yourselves. So thank you very much.

*The main areas my work focused on were: restoration, ecosystem services, climate change and carbon sequestration. My hopes are to present what I have learned from this experience and the great people I had the opportunity to work with to you folks in upcoming issues of the Newsletter. I chose to start with ecosystem services because ecosystem services are instrumental in understanding **why** we want to be forest land owners and **why** we choose to manage our forest and natural resources the way we do. The other issues, restoration, sequestration and climate change influence our decisions on **how** we manage our Tree Farms. If you have thoughts on these matters or suggestions for articles I look forward to hearing from you.*

Lastly, while the companion Christmas trees that came to the Nation’s capitol from Oregon this year with the National Christmas tree were nice, they couldn’t hold a candle to those that came from New Mexico Tree Farmers last year. (Of course, I may be a little biased.)

I want to again encourage all New Mexico Tree Farmers who wish to submit their writing to do so. Also, if you come across an article you think others might like, please send a copy to me with information on how to contact the author or publisher for permission to reprint the article. The easiest way is to submit your article, picture, poem, etc. is via electronic mail to John Harrington (joharrin@nmsu.edu) or by regular mail at:

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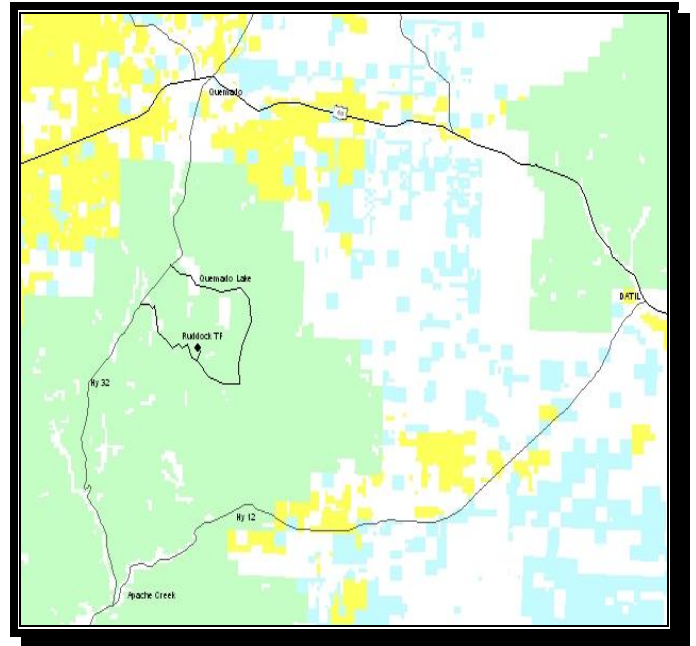




NEW MEXICO TREE FARM PROGRAM FALL FIELD DAY



**October 13th, 2007
10:00 am to 3:00 PM**



Directions:

Take NM Hwy 32 south to the Quemado Lake Road (NM Hwy 103) . Follow NM 103 (FS Road 13) +/- 14 miles to it intersection with FS Road 93, turn right, go west +/- 4 miles to FS Road 132, turn right and follow the signs



**2006 NM Tree Farmers of the Year
John and Karen Ruddock**

**Don't want to get lost?
Meet at the NM State Forestry, Socorro District office
At 8:00 am we can caravan out.
(Hwy 60 West, Socorro)**

