

**Jackson Demonstration State Forest Advisory Group Meeting
Fort Bragg, Friday July 11 – Saturday July 12, 2008
Minutes**

Friday, July 11

Field tour of Jackson Demonstration State Forest

Saturday, July 12

JAG Members Present:

Mike Jani
Kathy Bailey
Forest Tilley
Linda Perkins
John Helms
Peter Braudrick
Brad Valentine
Dan Porter
Jere Melo
Vince Taylor

JAG Members Absent:

Mike Anderson
Linwood Gill
Mike Liquori

CAL FIRE Staff:

Russ Henly
Marc Jameson
Helge Eng

Public:

Randall Marler, hunter education instructor
Ray Duff, Caspar
Chris Clutton

1. Agenda Review and Changes

- a. The Late Seral Development Sub-Committee report was expanded from 15 minutes to half an hour.
- b. Under agenda item *Review of Forest Management Plan*, change “potentially to take action on JAG recommendations relative to specifics in the Plan” to “identify topics we may be comfortable in endorsing versus topics to flag for future discussion.”

The agenda with the above changes was approved.

The JAG decided later in the day to postpone the agenda item “Review of Forest Management Plan” until their next meeting.

2. Approval of Minutes from the June 13-14 Meeting

- 1) Page 3, last paragraph. Change “department” to “Director”.
- 2) Page 4, agenda item 6, first paragraph. In order to clarify the availability of the Late Seral Development subcommittee report and minutes of their June 3, 2008 meeting, the Department agreed to make this report and minutes available to the public on the CAL FIRE web site.

John made a motion to accept the minutes, seconded by Peter. The motion to accept the minutes was approved unanimously (Jere Melo and Dan Porter abstained because of their absence at the June meeting).

3. Report on Recreation

Marc gave a brief overview of the recreation information available: campgrounds and trails are mapped and available in GIS. Some equestrian, bicycle and hiking trails are mapped. Annual information on camping use, collection of minor forest products is tracked. Day use is not formally tracked.

Part of the charter of the JAG is to provide input on the formation of a recreation user group (RUG), and provide advice on the process of conducting a survey. At the last meeting, Peter and Vince volunteered to do some initial work including a public meeting to solicit public input.

Peter and Vince provided an overview of the meeting on June 28, including a report of the meeting. There was a very positive atmosphere at the meeting, and a lot of willingness to contribute to the effort of enhancing the recreation program on JDSF. Shooters, bicyclists, equestrians, hikers, OHV users were present and provided comments. Common concerns were requests for enhanced signs on highways for people to find facilities, trail signs, trail maps, staging areas, inventory information (maps) for recreation users.

John and Vince solicited public comments. Two members of the public provided input on recreation:

Randall Marler stated that the local public, especially kids, need a place to shoot and a place to ride motorcycles and OHV's legally. There needs to be fewer locked gates. He requested a safe shooting range at JDSF, and designated off road tracks for OHV users, using existing roads and skid roads.

Ray Duff was at the June 28 meeting. He would like JDSF to post the rules for each trail, For future logging operations it would be nice to have alternative trails if the original trail is closed. A recreational crossing for Hwy 20 would be crucial for some recreation users such as equestrians that use both sides of the Forest. Trails should be restored to their original standard after logging if impacted by the logging.

The JAG briefly discussed an old railroad tunnel under Highway 20, beside the road to the egg taking station to the right. Nobody knew the condition of the tunnel, but the consensus was it was probably not in very good shape (Jere stated the timbers were rotting in the 1960's).

The JAG discussed the possibilities for formation of a RUG, possibly a "Friends of JDSF" model similar to existing groups at Boggs Mountain and Soquel Demonstration State Forests, and the future of the recreation sub-committee and its relation to the RUG and the JAG.

Vince stated the question now is to define the next step. The JAG discussed a plan to obtain agreement between the various recreation interest groups, and how to proceed. They plan to have their next meeting two weeks from today. Future action items would include a trail inventory, trail maps and trail development. This group seems like a natural core of the mandated recreation user group. Questions include how it would interact with the JAG. It would be helpful for the JAG to help these interest groups move forward, and help them navigate the bureaucratic process.

John raised the issue of process. The JAG's charter is to provide advice on the formation of a recreation user group. Questions to be answered include 1) what the recreation user group would be, 2) the process for conducting a recreation user survey, and 3) what would be the relationship between the recreation user group and the JAG (the RUG could be independent of the JAG or it could be a sub-group of JAG).

John proposed to have two members of the JAG represented on the RUG.

Vince proposed to continue the recreation sub-committee, and have it continue to act as a liaison with the RUG, helping to encourage its formation and reporting back to the JAG.

Russ stated the Director is charged with appointing a RUG. The RUG will probably interact extensively with the department on the practical details of its work.

Brad felt it is not the JAG's task to develop a RUG, but rather to provide advice to the department on the formation of such.

Vince thought it would not conflict with this mandate to continue to help user groups proceed with their plans. John and others agreed.

The JAG supported the concept of the recreation sub-committee continuing to work with the recreation community, with the goal of helping to establish a recreation user group, and report back to the JAG.

Helge pointed out that a recreation user group for JDSF will need to reconcile many different user groups that sometimes historically have been at odds with each other, such as equestrians and mountain bikers. Given the momentum of public interest, there is a real opportunity for CAL FIRE staff to leverage public interest in order to accomplish the many work tasks identified such as trail construction, marking and mapping.

The JAG members generally supported the potential recreation user group being an independent entity ("Friends of JDSF"), rather than a committee of the JAG. They anticipated the user group would interface mostly with JDSF staff, on detailed technical issues such as trail location.

The JAG discussed in some detail the wording of a motion to form a recreation sub-committee. The level of authority and independence of this group versus the JAG was also discussed in detail.

The JAG unanimously passed the following motion: "The JAG appoints a committee, consisting of Peter Braudrick, Vince Taylor and others including liaison and staff, to move forward on meeting with recreation users and providing input to the JAG on recreation issues as identified in the charter, including (1) the process of conducting a recreation user survey, (2) establishing a recreation user group and (3) developing a recreation plan, within the context of the management plan. The committee is to report back to the JAG regularly."

In order to avoid confusion over the use of the terms "committee" and "sub-committee", the JAG agreed henceforth to refer to all their appointed bodies as "committees".

Peter mentioned the recreation committee will meet next on July 26, 10 am, at JDSF headquarters.

4. Report on Forest Structure Information Available

Marc provided a partial overview of GIS and other information available. The Indian Fire temporarily interrupted this effort. Marc will continue the list in the next two weeks.

5. Report on Inventory Information Available

Vince provided an overview of inventory efforts at JDSF. Two parallel inventory efforts have been ongoing, 1) the Continuous Forest Inventory (CFI), and 2) the Forest Resources Inventory (FRI), sometimes also referred to as the Intensive Forest Inventory (IFI).

CFI plots were initiated in 1959. The CFI plot design was redesigned in 1989, making backward compatibility difficult. The CFI plots have been consistently measured every 5 years (except 1979). The last measurement of the CFI plots was completed in 2005. The most recent FRI inventory was completed in 2005.

Vince pointed to an FRI report that pegs total gross conifer board foot inventory for JDSF at just about 38 thousand board feet per acre. He called attention to the scatter plot of residuals for the diameter-height equations, and what he felt was a large gap between predicted and observed values. He stated the defect appeared to be on the order of three to four percent, much less than what he is used to seeing. For the future, Vince recommended a management unit-based

inventory, similar to that used by Mendocino Redwood Company (MRC), including unit-specific diameter-height equations.

John pointed out that inventories are more than just trees. He felt it was very appropriate for the JAG to comment on the inventories at JDSF, and pointed out that inventory efforts need to focus on the full range of natural resources, not just timber.

Mike asked whether the JDSF plots were stratified, and whether the diameter-height equations were stratified by site class.

Helge stated the plot system was not stratified in any way, but rather allocated on a systematic grid of plots. This makes multi-purpose post-stratification of the plot grid statistically valid. This is an optimal strategy for a research forest, because an unlimited number of researchers can use the same data for different studies. MRC's stand-based inventory is cost-efficient for a private landowner with a fixed set of management objectives. The JDSF and MRC inventories are examples of two specific systems along the continuum of different inventory designs in existence. Both inventory systems have their strengths and weaknesses.

Plots in the database have the site information available to stratify diameter- height equations by site. It would be incorrect to identify any particular report as the official report for JDSF. The database is constantly updated and improved. Recent research on JDSF and elsewhere indicates there may be more micro-variability in site index (within stands) than previously thought, suggesting that a new look at site index as a stratification tool may be useful.

Vince correctly pointed out that the change in CFI inventory design in 1989 provided a hiccup in the historical chrono-sequence of forest conditions. Helge believes the sequence of measurements from 1989 through 2005 provides the more up to date measurements of forest growth and structure conditions on JDSF.

Marc stated he agreed with enhancing the parameters measured in the CFI inventories to gain a measure of forest structural characteristics and forest dynamics over time. He encouraged weighing complexity against the cost of measurements, with an eye toward maintaining a system that is realistic to implement even in lean fiscal times. Research and development efforts like CFI plots are usually the first to go in financially difficult times, which is one of the primary reasons why long time series of re-measurements on permanent plots are hard to come by. One of the reasons JDSF has been able to successfully implement repeat measurements on the CFI plots since 1959 is that the inventory design is relatively simple and inexpensive to measure. One possibility is to designate a basic core of essential measurements that will always be measured, and a set of additional measurements that can be implemented when budgets allow.

Dan stated that permanent plot measurements like the JDSF CFI system are a rare but extremely valuable information resource to help us understand forest development and recovery dynamics.

JAG members suggested enhancements to CFI design, including parameters aimed to allow estimates of ecosystem recovery, such as large woody debris, structural characteristics and fire scars. Other suggestions included photo points, for example at CFI plot centers. Vince suggested posting digitized air photos of JDSF. Helge noted there is an opportunity for CAL FIRE to initiate and manage a cooperative landowner effort to maintain a shared databank of legacy information including air photos and inventory data.

Department staff emphasized they welcome JAG input on ways to enhance JDSF forest resources inventories going forward, including all forest resources, not just timber.

6. Report from Late Seral Forest Development Subcommittee

The late seral development (LSD) prescription currently is envisioned to have two entries 20 years apart with basal area removal target of approximately 30 percent in each entry, favoring the larger trees for removal.

There was some discussion over whether the LSD prescription should contain one or several entries. John pointed out that two entries better enable you to recover from unintended consequences, and spread out the treatments with a more gradual effect of each entry. Dan stated that the LSD sub-committee's goal was a) to achieve a low density of large dominant and codominant trees to represent the old forest condition, and b) the 30 percent removal may not get to that condition in one entry, therefore the idea was a two-entry prescription was to get there more gradually.

The JAG discussed two related technical issues pertaining to the draft LSD prescription:

1) whether the LSD prescription intended to retain all trees greater than a certain diameter. Russ stated CAL FIRE would probably not have that hard and fast a rule. John was of the opinion that any limitation on harvesting trees larger than a certain diameter would apply only to the first entry.

2) whether the intent of the LSD prescription is to be able to continue to manage late seral forests, i.e. being able harvest large trees after the two entries are completed, potentially in perpetuity, or whether the LSD prescription is a one-way street toward an eventual reserve.

The consensus conclusion to both of the above was that the JAG mandate for the LSD prescription is how to accelerate achievement of late seral conditions, it does not address what to do with it after that, once you have reached late seral conditions. Kathi stressed the importance of clearly spelling out what the prescription does and does not say, especially as it pertains to 1) and 2) above, and in general future management after the first one or two entries. We need to be clear in the prescription on what is intended at the 20-year point and what is intended after year 20, between 20 and 100 years.

A lengthy discussion ensued on technical details of the handout containing Linwood's LSD prescriptions and Marc's CRYPTOS simulation of these. Issues included the suitability of the 100-year species and density targets, and size class distributions. John stated that the simulation of Linwood's prescriptions was intended as decision support and it was not a part of the LSD prescription document.

The site indexes used in the simulation are generally higher than what is found on JDSF, in the Brandon THP area. Most of the site indexes used are from Humboldt county at Prairie Creek. Some discussion of whether the higher site number is realistic to expect from site II and III lands on the Brandon THP. Jere suggested using cruise data specifically from the Brandon THP.

Jere stated that economics is a part of the mandate for JDSF. This timber sale and management on JDSF in general is supposed to contribute toward generating at least the \$7.1

million required to support the State Forests. This sale does not have to generate \$7.1 million, but there has to be a net positive contribution. He has no problem allocating this THP to a late seral development prescription, but he questioned whether the draft prescription in its current form removes enough timber to make a profit, or even pay for itself.

An economic analysis is necessary to determine whether the sale will pay for itself and contribute positively toward the \$7.1 million. John stated that as an article of faith, taking about 30 percent of BA will make it pay for itself. Mike stated that if the Brandon THP ends up taking a large percentage of the harvest volume from under story fir, it probably will not pay for itself. He felt economics should not drive the prescription, however we have an obligation to make sure it is economically efficient before we launch.

Vince felt Brandon revenues should not be considered in isolation, but we should also consider replacement timber from elsewhere, as described in the settlement agreement.

The JAG discussed whether we are giving the dominant and codominant leave trees the space they need to accelerate growth and by implication, the achievement of late seral conditions.

Vince felt that small trees will largely be left un-harvested, and questioned whether the harvesting of larger trees to enhance growing space around them will be enough to achieve a 30 percent basal area reduction. Mike proposed we show conceptually/graphically what the stand looks like now, during harvest, and what it would look like after treatment under the eventual LSD prescription.

The JAG discussed what parameters would be useful to describe stand conditions for management. Candidates discussed included trees per acre, basal area, and stand density index. John thought any single parameter would be insufficient. The general issue of the mix of numerical versus prose criteria to define the LSD prescription has not yet been finalized.

Ray Duff provided public comment. He felt the nexus of Brandon Gulch and revenue generation is potentially troublesome. The Brandon Gulch THP area is one of the primary avenues of recreation for the public. Consequently you cannot conduct an economic analysis of revenue generation at Brandon Gulch independently of social impacts such as recreation, in the same way as you could analyze economic impacts at other, more remote sites.

Vince discussed his report with recommendations for recreation as it pertains to the LSD prescription (posted 7/10 on Google Groups). We should strive for no impact on people riding or walking through the area. We should put a no-cut buffer of 150 feet to reduce visual impact. Harvest can occur near the road, but should be done in a way so as not create a negative impact.

Mike pointed out that visual issues are often temporary and can be resolved within a year.

There was some discussion of the layout and orientation of yarding corridors to minimize visual impacts.

7. Report on Current Issues in Forest Management on the Forest

Marc provided an overview of the Indian fire on JDSF. The fire started the night of June 20-21 as a result of a lightning strike in the vicinity of the Indian Creek campground. The fire was contained at about 2,000 acres. It was primarily an under burn. Some mortality and injury to individual trees occurred. Marc anticipates 20-25 percent fir mortality (number of trees), but little or no redwood mortality.

The fire touched three existing THP areas. The West Chamberlain THP (8 percent of the area), the North Fork Spur THP (20-30 acres), and 90 percent of the Upper Parlin THP (re-marking will be necessary). Marc does not anticipate any changes to the THP schedule as a result of this fire.

CAL FIRE plans to study and monitor the fire. JDSF staff will put in inventory plots as soon as feasible. John and Mike suggested photo series as one inexpensive and useful monitoring tool.

Current staff at JDSF is approximately 20 permanent personnel. John requested an overview of listing of staffing at JDSF, current and after authority to hire additional people.

Mike asked about management alternatives for illegal dumping. Marc said it is a substantial budget item. They currently have two retired annuitants, and occasionally camp crews. JDSF barter with Mendocino county to patrol some additional county roads in exchange for dump fees, as a creative solution to limited budgets in both agencies. Alternatives to combat illegal dumping and vandalism include restricting access using gates and other barriers, which is not popular, and increasing security. Increasing security would require three to four full time staff positions, coordinated by JDSF.

Peter asked about the shooting area. There was some discussion of the safety aspects of shooting, given the proximity of other recreationists on the Forest. JDSF placed rock barriers in the area to discourage illegal shooting.

The road program is effectively on hold due to fires and a lack of funding.

Two fish ladders in Caspar Creek are being replaced, with a budget of \$1.1 million. This effort is partly funded by grant funds from the Coastal Conservancy and CalTrans. Access to the Caspar Creek construction area has been temporarily closed during construction this summer, for public safety reasons.

The North Fork Spur THP with an associated Option A plan has been submitted to CAL FIRE Forest Practice for review and approval, and is awaiting a pre-harvest inspection pending the return of Forest Practice staff from fire assignments.

The 14 Gulch THP, included in the settlement agreement for the enjoined THPs, is in review and is also awaiting a PHI.

JDSF staff are working on new THPs, Dunlap, Hare Creek and Whiskey Springs. A new THP is also under way in the South Fork Caspar Creek study area. The research consortium is gearing up for the second phase of the Caspar Creek study. CAL FIRE plans to have the Redwood Science Lab researchers meet with the JAG in the near future to describe the study and the planned next phase.

The department will also amend the Brandon and Camp 3 THPs to implement the changes from the settlement agreement. Forest Practice review is expected to be quite involved.

Research and demonstration staff has been tied up of late with the Caspar Creek fish ladder project. A UC graduate student is currently doing field work on a study of the carbon content of trees. The Caspar Creek watershed project is ongoing, coordinated primarily by the USDA Forest Service.

JDSF staff has been assisting Caspar residents in developing disaster evacuation routes.

Vince requested a copy of the North Fork Spur THP. Russ previously emailed the link to the CAL FIRE THP web site to all the JAG members. CAL FIRE will also send a CD with copies of the above THPs and Option A plan to Kathy, Linda, John and Peter.

There was some discussion of the role of the JAG in encouraging funding, research and monitoring of the Indian fire. Marc plans to do basic monitoring in house, focused on botany, birds, large woody debris and structural characteristics. Mike suggested photo time series of burned areas to demonstrate forest development after a fire. John discussed the role of JAG in exploring the availability of emergency funds “while the smoke is in the air”, to initiate monitoring and restoration projects. Restoration of dozer lines and other environmental disturbance caused by fire fighting activities on all fires including the Indian fire, is routinely implemented by CAL FIRE staff and funded by emergency funds.

8. Report on Forest Management and Option A

Helge described the regulatory background and methodology of an Option A plan. JDSF management is highly constrained by land and policy constraints, consequently the modeling did not need to evaluate a wide range of alternatives. Because most acres on JDSF are spoken for a priori, the analysis was more of a stand level analysis than a forest level analysis.

WLPZ zones in the model were variable-width and were based in part on GIS models and partly on verified field observations where they existed.

The Option A plan implements the directions in the management plan for desired future conditions and management prescriptions for how to get there (management plan tables 7 and 8).

Approximately 1,200 acres per year are scheduled for harvest entries each year, of which 270 acres are even-aged harvests.

John asked what landscape constraints would have to be relaxed in order to harvest at a level equal to growth on the Forest. Helge believes the Forest cannot achieve a harvest equal to growth given the current set of landscape constraints on management. As inventories continue to accumulate over time, this points out the real challenges JDSF face in maintaining a mid-seral managed working forest.

9. Preliminary Discussion of What Constitutes a Research and Demonstration Forest: Special Considerations

John discussed some of the conceptual issues the JAG will face going forward in advising on the research, demonstration and information distribution aspects of JDSF.

JDSF, given its large size is unique among research forests. One question to answer is “what is a research, demonstration and outreach forest in the context of the 50,000 acres JDSF property?”

Research, demonstration and outreach: clients are local, state, national, state and international. Most important of these are the local clientele.

Inventory: if you are going to do research, you need to identify what you need to know about the Forest. It is important for the JAG to address what information and data will be needed. What is the minimum amount of data needed as a demonstration forest to do routine management?

What funding, staffing and facilities are needed to make JDSF a world class research and demonstration forest?

The JAG will need to address the matrix of land management priorities. Some areas may be allocated to research, some to demonstration, and yet other areas to a matrix that is being routinely managed.

An essential part of a vision for JDSF includes the concept of collaboration. This includes strategic coalitions at local, state and international levels, and bringing in people, funding and ideas.

John suggested scheduling a future JAG meeting at the UC Blodgett research forest, with the general objective of finding out how UC researchers and managers approach the task of running a research forest.

The meeting adjourned at 1600 hours.