Alaska Northern Forest Cooperative  
Managing Small Trees in the Northern Forestry  
A Technical Workshop  
October 12-14, 2004  
Wood Center Ballroom, University of Alaska- Fairbanks

Day 1 Four 90- minute panels on each of the four topics  
1. Reducing Hazardous Fuels  
2. Subsistence Usage  
3. Value-added Wood Utilization  
4. Why Thin and Plant in the Northern forest

Day 2: Field trip near Fairbanks that focuses on workshop topics

Day 3: (1/2 day): Lead speaker summarizes panel and field trip information followed by two facilitated group discussions. First discussion focuses on identifying information needs/ gaps in the four topic areas. Second discussion group focuses on identifying ways that ANFC (Alaska Northern Forest Cooperative) can more effectively share and disseminate information.

Day 3:  
Identify information needs / gaps in four topic areas. A fifth topic area “other” was added.  
1). Hazard fuels  
2) Subsistence Use  
3) Value Added  
4) Thin & Plant  
5) Other topics

Identify ways to share and disseminate information. How do we proceed from here?
Hazardous Fuels

- How we design shaded fuel breaks in deciduous stands and different forest types.

- Making fuel breaks approach more viable by using fiber

- How locate fuel breaks throughout the northern forest (landscape perspective on placement); perhaps design to facilitate suppression activities such as aerial retardant drop and vehicle access for tanker engines while being mindful of ORV access to wildlands

- How to work with communities and urban planning when creating fuel breaks

- How we use wildland fire to extend or connect fuel breaks

- How to incorporate soil and landscape features in locating fuel breaks

- Do these things (fuel breaks) work in boreal forest? How do they affect fire behavior? Differences between conifer and deciduous treatments.

- Effects of fire suppression tactics in conjunction with fuel treatments

- What are the economics and benefits of fuel treatments? (Is the cost of fuel breaks an effective offset of suppression costs?)

- Anecdotal results of success / failure as well as why it has succeeded or not.

- What is the process for public involvement in evaluating options for treatment of hazardous fuels (type of treatment and location)?

- Look at creating a fire risk or prevention “zone” in urban plans.

- Subdivision review process in Fairbanks North Star Borough should include Division of Forestry.

- Educate public and policy makers about economics of fuel treatments (cost offsets or tradeoffs in context of fire risk).

- Lessons learned about community wildfire protect plans (CWPP) in Alaska; get people to discuss these.
• What is impact of fire on value added companies in both short term and long term?

• Who / how will we maintain fuel breaks (lifetime costs)?

• How to transfer costs out of fire budget (i.e., preventative instead of reactive)? How do we allocate funds in optimum way to get best results? Subsidies and tax incentives for fuel reduction, regulatory options, etc.

• Trails are amenity – users may help maintain the fuel breaks / trails.

• Understand requirements of corridors for wildlife so they benefit wildlife (flipside—creating access increases harvest efficiency in localized areas, which may reduce abundance).

• Restoration of fire lines look at benefits / costs and fire lines

• Take full view of positive and negative effects. Don’t focus just on positive effects of fuel breaks.

• Who (which community or subdivision) gets the fuel breaks and who doesn’t? What are the criteria? What is strategy?
Subsistence

• How do we capture the subsistence value of all fuels management?

• Must hear from Alaska Natives

• Land managers need better understanding of subsistence and this is tied to non-timber forest products (moose, forest chemistry, etc).

• We have good systems for inventorying traditional forest products, but need system for non-timber products inventory.

• Recognize the multitude of uses in addition to subsistence (e.g., recreation)

• Try to understand traditional “management” systems as they may be internalized by Native practitioners

• We need better understanding of revised DNR regulations regarding subsistence uses and non-timber forest users.
Value Added

- Traditional definition of value added is not adequate. We need to know what the characteristics of opportunities are so we can see what makes sense, both short and long term.

- Need to diversify the products from small diameter trees.

- Need to know what the options are and the economics associated.

- Look at biomass for electricity: what current technologies exist; what are regulatory barriers, and tariff rates; what are the opportunities in the next 5 years.

- Evaluation of scales important to understand which industries may be feasible in northern region (what is minimum size that is economical to start with).

- More integration of industrial processes. Drugs and cosmetics, for example are small scale.

- What is best use of forest? Annual value of moose may exceed wood products for example. Make a list of all products and their per-unit value to gain perspective on where economic development might best occur.

- Local bankers need to think in terms of appropriate scale and cumulative effect of small projects.

- Need more emphasis on drugs, particularly cancer patients and local production of these meds. Interested parties may include Fairbanks Memorial Hospital Foundation (R&D branch), Alaska Industrial Development and Export Authority, FEDCO (foundation funds).

- Create new high tech programs (collaborative effort between NRRI at U of Minnesota-Duluth and UAF) to examine phyto-chemical potential for drugs, cosmetics, healthy foods, and agri-chemistry. Chemistry of N. American plants has regional variation. DOE, Dept. of Health, biodefense. Work toward understanding all plants, not just trees.

- Economics of biomass (green energy)—how to put in context of societal values beyond simple assessment of fuel replacement cost (e.g., forest management reduces fire risk, enhances habitat, provides “carbon neutral” fuel).
• What are requirements for successful value added products? Economists, bankers, public trust etc. What needs to be done to access funds? Need good resource info, geographically referenced, on manufacturing process and the market. Industry needs assurance of resource supply over a defined time period, so community interest and acceptance is important.

• Need integrated economics model of these

• Look at non-timber forest products and incorporate in our next meeting [teleconference]. Include local hospital in this for potential drugs. Hospital foundation, Fairbanks Industrial Development Corporation.

• Major conference on non-timber products coming to Fairbanks [when? who sponsoring?]

• Need a forest economist (from PNW) to address northern forest.
Thin and Plant

- Study stocking standards for FRPA
- Not just plant / thin, but objectives of stand density management.
- Look at what Canadians are doing with same species.
- Look at what we have done here historically (retrospective study of existing timber sales)- what are harvested stands doing now? Are they well – stocked? Controlling for site conditions and seed crop during stand initiation, was there an advantage of planting over doing nothing or just scarifying?
- Unless we create a demand for products, no reason to pay for thinning and planting.
- Much of research could be funded by the industry.
- Need more applied forestry coming out of UAF, such as computer models of stand changes in response to different treatments (forest vegetation simulator). Need version of model for Alaska
- We have data, we need statisticians and modelers. Site index curves for some species available. Volume tables in CF are coming.
- Products may not be just fiber- related. There are reasons to thin and plant for non-fiber related reasons.
- Need to tie requirements for products to information on stands that we need.
- Maintain and improve the ANFC compendium on an annual basis.
- Stocking standards should consider stand conversion and land ownership. This might lower costs of planting and or thinning.
- Could have operator do stand improvement adjacent to timber sales (e.g., fuels reduction, habitat enhancement, spruce release) in lieu of timber stumpage or planting requirements. U.S. Forest Service has had a program for this for many years.
- The future is in mixed species and hardwoods that would solve many current problems (hazardous fuel, habitat desires).
Other **topics with research needs**

- Forest inventory of northern forest and FIA
- Get other agencies and land owners involved with university
- Many forest health issues. Taking a look at forest health challenges will affect these ideas
- Focus must be the forest and the resource in total (expand beyond site-specific studies).
- Alaska [Home Builders Association](#) should be involved
- Palmer Experimental Station (university) has approximately 3,000 acres that could be used for applied research and demonstration projects.
- Choose 5-10 goals out of all these topics listed today so Coop can focus [topic for next Board teleconference](#)
2. Ways to share / disseminate information

- USFS region centennial is November 13, 2004. Let them know our findings and needs.

- Highest priority should be compendium of research and data and monitoring projects and update annually.

- Use the compendium proactively to identify gaps in our knowledge.

- **Provide information to** both operational **managers** and policy **makers**.

- As organization, provide information but not lobby directly.

- Andy agreed to put workshop proceedings together (Powerpoint outlines and papers)

- Website – Val, Dave V., Cooperative Extension, will build. Put compendium, proceedings, and announcements.

- Need to emphasize where more information needed. Provide a consensus on what priorities for research are.

- Annual meeting of researchers and managers could be hosted by ANFC (1 day session, ½ day field trip)

- ANFC could appoint standing committees- e.g. communication committees, etc. Executive Board could decide on committees [address during next teleconference].

- Publish summaries of sessions in “Under the Canopy” this December Andy Mason and Bob Wheeler

- Next meeting could focus on overall forest and resource (not the stand or the species) [teleconference—choose date, location, theme, develop agenda].

- Joe Young invites everyone to Tok for field trip – generate Native participation. [teleconference]

- *Agroboreal*is and *Natural Resource News* are two other venues.
• Biomass fuels may meet many community needs. Wildlife Society- SAF joint meeting next April may deal with ecological and fiber supply issues of biomass industry; perhaps Coop can host a workshop on engineering feasibility of biomass.

• Bring in economists and engineers for feasibility workshop.

• Create the ability to address these issues at any level [I’m not sure what this means]

• Fire has created sense of urgency.

• Need committee to work with Borough on fuel reduction. Funding exists for this. See Chris Maisch.

• Borough and city need to know ANFC exists. Make a presentation to the Chamber of Commerce, Borough, City, and Anchorage also.

• UA Land Management should be included. Tanana Chiefs, Alaska Forest Association

• To understand needs of communities, we need to make contacts, use listserv for feedback, survey of target groups

• Press release about cooperative activities could be helpful

• Don’t focus on urban areas at the expense of rural areas.

• Alaska Native Science Commission and such groups could be partners

• May need specific people dedicated to this.

• Use fire and fire prevention to create partnership with municipalities. Build on that.

• Don’t over commit the cooperative. Do a few good things right. Share information and facilitate communications

• Get UAF to hold conference with the Chamber, Bankers, etc. on development of value-added industry (SNRAS & Business School).