

A District Ranger's Perspective on Aspen Restoration
Tim Benedict, District Ranger, White Sulphur Springs Ranger District
Lewis and Clark National Forest
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Abstract

How do you get an aspen management program started from scratch? How do we take science and turn it into management? Aspen has declined by 64 % in Montana (Jodie Camfield, Power point presentation, 2004). The aspen sites on our district serve as unique sites of diversity and have been neglected for many decades. By developing partnerships with research, peers, and other ranger districts we can start building a successful program. Begin with what you have to work with which might include only a low budget and volunteers but at least you get started. Try new approaches and use known methods of fencing and prescribed fire that deliver results. On the White Sulphur Springs Ranger District we are developing some ideas to sprout our aspen management program.

Introduction

The main key to open the door to an aspen restoration/management program is simply getting started. Getting started means leadership, vision, partnerships and program development. A leader does not have to be the line officer to get started but it is important to gain support of the organization's leadership. The District Ranger's role is to lead others to champion aspen restoration thereby turning science into management. The aspen sites on the White Sulphur Springs Ranger District, Lewis and Clark National Forest have not been proactively managed; however, there has been some effort to treat these sites but it has been minimal because of the lack of or minimal funding. However, it was special funding that did allow the program its start. On the Lewis and Clark National Forest aspen's commercial value is limited except as firewood. The aspen sites have high scenic, ecological diversity and wildlife values. Due to the lack of disturbance through fire suppression and lack of treatment, some aspen sites are overgrown by conifers and others are decadent.

On the White Sulphur Springs Ranger District we have approximately 1,913 acres of aspen (see Appendix 1) on National Forest. This does not account for all aspen sites on the district because stands less than 5 acres are not delineated, other sites have not been inventoried and other aspen are present in mixed conifer sites. Montana's 255,000 acres are scattered among the middle-elevation conifer sites and at the lower forest boundaries (Jones 1985). Although it is a small component it has a big value. The aspen forest type is important for many species of birds and mammals especially in the interior West, where it is the only upland hardwood tree species, and where it frequently is found in groves in the coniferous or as isolated stands in mountain grasslands and shrublands (DeByle 1985). Aspen stands provide an ecological uniqueness and a species diversity value. That value of diversity is expressed in sustaining a healthy population.

Not much, if any, research has been conducted in this portion of Central Montana on aspen.

So how do you take the knowledge of science and move it toward on-the-ground management? I would like to introduce the SPROUT principle when developing an Aspen Restoration Program that could aid in moving, growing or rejuvenating a program. Funk and Wagnall's Standard College Dictionary (copyright 1966) defines sprout – (1) To put forth a shoot; begin to grow; germinate (2) To develop or grow rapidly (3) to cause to sprout.

S = Start. Get started, no matter how small. If you wait until you get enough funding you may never get started. Start building momentum through your own enthusiasm. Empower and support your staff to creatively move forward. Start taking the lead. Don't wait for someone to take the lead, go ahead and take the lead yourself. Start with volunteers or a program that funds interns. Start with your vision for your area and express the big picture clearly state what you see as the desired future condition. Start small and build up credibility and confidence. Start influencing. Sociologists say that even the most introverted individual influences 10,000 other people during his or her lifetime.¹ Start selling the idea (Pat Pierson, personal communication). Get started!

P = Partnerships. Someone has said "Seek out partners that have similar goals and connect with a cause waiting to happen." Partner with our public to gain their support to accomplish management. Partner with local managers, researchers, universities and those who have experienced success in managing aspen. On the Red Lodge District of the Gallatin National Forest partnerships have been developed with the Rough Grouse Society, Audubon Society and the Montana Fish, Wildlife and Parks (Pat Pierson personal communication). Connect with those champions who have a strong desire to make the vision a reality. There are many partners out there looking for a cause to connect with. Seek them out.

R = Reproduce Success. There are many resources to develop prescriptions from including research articles, management implications and past conference and symposium proceedings. A great source of knowledge and experience to help you succeed in your management strategy are from local land managers who have tried different approaches of prescribed burning, fencing, cutting, and through trial and error have found out what works.

O = Organize your program. Organize a strategy for funding through partnerships, your budget, volunteers, interns and seasonal employees. Organize an inventory to determine stands at the highest risk to determine treatment. Organize a plan to proceed including how to do your public involvement/scoping, and the appropriate National Environmental Policy Act (NEPA) document. Organize a prescription/treatment.

U = Unify your organization. Unify your team and allow them to develop the vision of this project because their ownership is essential for success. A unified vision with ownership brings support for the future and buy-off with the staff, leadership and our partners (our publics).

¹ Maxwell, John, Leadership 101, Nashville: Thomas Nelson, Inc., 2002

T = Teamwork. It takes a team to meet the common vision. Develop your dream team. The team consists of many specialists that bring to light different perspectives, expertise from their professional disciplines that are needed to achieve the common vision of aspen restoration. These disciplines of wildlife, fisheries, soils, hydrology, silviculture, landscape architecture and many more only help the team come up with solid proposals. An approach that could be utilized is a 3 to 5 year integrated vegetation management plan that includes timber management, fuels treatments, and aspen treatments for out years and could be a very successful team approach to a team effort and an agreed out year budget request system. Teamwork brings cohesion, cohesion brings a unified purpose. Where there's a will there's a way; where there's a team, there's more than one way.² John Maxwell stated "Collaboration is multiplication." If we are willing to work with others, to yield someone else's expertise in an area, to put cooperation above our individual interests, and to allow others to succeed on their own areas of proficiency, then we will accomplish more than we could ever do alone-more than we ever dreamed possible.³

Good Teamwork = Good Team Planning = Good Decisions = Good Projects (Gary Hanvey, personal communication)

² Maxwell, John, *Laws of Teamwork*, Nashville: Thomas Nelson, Inc., 2001

³ Harris, Katherine, *Center of the Storm: practicing principled leadership in times of crisis*, Nashville: Thomas Nelson, Inc., 2001



Figure 1 - Moose Creek Aspen Regeneration

What we have done

The start of our current management has been through some prescribed burning and some temporary electrical fencing. We have seen some good responses with abundant suckering and height growth in existing saplings. The decrease in grazing and the disturbance from prescribed fire has increased root suckering and height.

The aspen stand treated in Moose Creek (Stand A) shows a response (see Appendix 2). This stand was prescribed burned in October 21, 1999. Actual weather conditions are found in Table 1. Fuel Moisture was less than 10% for 10 hour fuels and 8 to 10 feet for average flame length.

Table 2 – Actual Weather Conditions

Time	Temperature	Relative Humidity	Wind Speed/Direction
1230	59	30	SW 3-5
1330	60	31	SW 3-5
1430	61	32	SW 3-5

The Moose Creek Unit (Stand A) (see figure 1) treated by prescribed burning shows an average of 2,568 stems/acre from three random plots (see Appendix 3). It appears that there is some damage from elk and cattle but it is minimal.

The Sheep Creek Unit (Stand D) was originally set up with an electric fence (see figure 2) powered by a solar powered battery to develop sufficient 1 hour fuels (grass) for greater intensities to kill overstory. However, along the way we discovered that the fence protection alone was giving protection enough from grazing to increase suckering/stems per acre and height growth of existing saplings. Currently, we have had little to no grazing for the last 3 years. A field review in early August showed an increase in 1 to 1.5 feet in height from 2003 to 2004. The regeneration was patchy and saplings height ranged from 3 to 4 feet.



Figure 2 – Sheep Creek Electric Fencing

A possible inexpensive treatment could be electrical fencing for 3 to 5 seasons to establish seedlings and aspen. Our annual estimated cost for 2004 to install the electric fence, maintenance and take down is approximately \$1,500 for 76 acres. The approximate cost for electric string, solar panel/battery and fence posts are \$1,300. This is an inexpensive approach to protecting aspen seedlings/saplings that have had some elk and cattle damage.

Where are we going?

We are growing and expanding our aspen program by building partnerships with research and other organizations. Our hope is to build a relationship with research in central

Montana to launch a program that treats a variety of sites with different methods (cutting burning, ground disturbance) of this diminishing ecological niche.

Ultimately, we put our thoughts into action. Sir John Browning states “People judge you by your actions, not your intentions. You may have a heart of gold, but so does a hard-boiled egg”

References

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