

The Forest Steward's Journal

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Journal of the Forest Stewardship Foundation

The MISSION of the Forest Stewardship Foundation is to “educate and inform landowners, natural resource professionals and the general public about the science and ecology of forest lands, the many values derived from forested lands and the principles of sustainable forest land development.”

DISCLAIMER: As in the past, we again advise that this information is submitted for your interest only. The Foundation's mission, as indicated above, is to “educate and inform”, not to advocate or persuade. The Foundation takes no position, either endorsing or opposing, approving or disapproving, any of the assertions or arguments in the contributed information.



From the Chair

Happy New Years! Here at the Foundation we welcome 2019 with optimism and visions of fulfilling our mission of educating forest landowners, resource professionals and the general public on natural resource issues.

On tap for 2019 is the upcoming joint landowner conference with the Society of American Foresters. After 10 years in Helena we are moving the conference this year to Butte. The conference will be held on April 12 at the newly remodeled Copper King Motel. The theme is “Montana’s Forests Past, Present and Future”. As in the past joint meetings we have come up with a wide range of interesting presentations that will be of interest to landowners as well as professional foresters. Since our first conference the luncheon presentations have been eagerly anticipated and this year’s presentation will be on the colorful history of Butte. We are confident that everyone will thoroughly enjoy this.

As we have done in past years we will be sponsoring a “Ties to the Land” workshop on succession planning the following day on April 13. The workshop will be held at the Butte Business Development Center in uptown Butte. If you have not made a decision on who will end up with your property you need to take in both the landowner conference and the workshop. Our long time friends and excellent instructor team of Kirk and Madeline David will once again conduct the 8 hour workshop.

For several years the foundation sponsored workshops on conservation easements. These workshops were held in Kalispell, Libby, Lewistown and Red Lodge. The workshops were very successful and it is my hope that we can continue them in 2019.

As always we will continue the bi-annual Forest Stewards Journal. A new addition to the journal will be a series of articles by Amy Gannon, insect and disease specialists for the Montana DNRC. I hope you enjoy this journal and the variety of information within. Please remember that we would not be able to do anything without the support of your generous memberships. So, please keep up your support.

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The Kootenai Forests to Rivers Initiative

By: Angela Wells, Montana Department of Natural Resources and Conservation
(DNRC)

In the natural resources field, we frequently hear the claim that more information is all that people need to be motivated to thin their forests to reduce wildfire hazards, address noxious weeds, and protect water quality. “Forest owners just need more education!” is a common refrain among forestry-oriented laypeople and professionals. However, experience in the real world in addition to academic research demonstrates that it takes more than education to help landowners adopt stewardship practices.

Truly effective landowner engagement starts with tailored messages that appeal to landowners’ individual motives, barriers to action, and reasons for loving their land. More importantly, messaging must also direct landowners to resources which are appropriate for what they want to accomplish and attainable within the reality of their daily lives. The Kootenai Forests to Rivers Initiative (KFRI) does just that. KFRI is a partnership between the Montana DNRC, the American Forest Foundation (AFF) and the Montana Tree Farm System. Its goal is to connect unserved Lincoln County forest owners with services they can use to reach their management objectives while increasing overall resilience of private forests to wildfire.

Instead of taking a scattershot approach, the KFRI chose to reach landowners concentrated within specific areas of Lincoln County where forest stewardship will have the most impact on protecting communities and public water supplies from the effects of wildfire. With this criteria, KFRI decided to start its work in and around the Tobacco Valley and the Highway 2 corridor between Libby and Troy, focusing on forested properties of 20 acres or more. KFRI partners also had a strong desire to reach beyond the “model” landowners in the Tree Farm or Stewardship Programs and cast a wider net to involve landowners who also care deeply about their forested properties but are not currently doing any active management.

During the summer and fall of 2018, the KFRI conducted outreach through a combination of digital media and direct mail. Landowners received one of two offers: a visit from a consulting forester (made possible by AFF) or a visit with a fellow experienced forest landowner, aka peer mentor (coordinated by the Montana Tree Farm program). The response to these offers of technical assistance was overwhelming, more than 5 times what the KFRI team had projected for its initial outreach.

Visits to participating landowners began in late fall 2018 and will continue into the spring of 2019. During these visits, landowners have the opportunity to discuss their concerns and desires for their property with a forestry professional or peer forest owner. Based upon their specific interests, they will then be connected with resources to help them accomplish their goals, including cost-share programs, contractor referrals, or management planning services.

Over the next three years, the goal of KFRI is to help one-third of landowners within the project area complete one or more stewardship activities. If successful, KFRI’s targeted outreach will result in adoption of stewardship practices at a rate ten times greater than standard mass-media landowner education, leading to a more meaningful impact on forest resilience at a landscape level while also respecting the unique values and interests of Lincoln County landowners.

For more information on the Kootenai Forests to Rivers Initiative visit kootenaiinitiative.org.

An Insect Threat to Subalpine Fir

Amy Gannon, Forest Pest Management Program Coordinator/Entomologist, Montana DNRC

The conical crowns of subalpine fir (*Abies lasiocarpa*) stand out unmistakably along riverbanks, throughout forests and up alpine slopes across Montana's western landscape. In addition to providing a scenic backdrop, they provide valuable wildlife habitat and essential watershed functions. But this tree is under threat by a non-native invasive insect, the balsam woolly adelgid, *Adelges piceae* (Ratzeburg) (BWA). Balsam woolly adelgid is a tiny wingless, sucking insect that feeds on branches, twigs and the main stem of subalpine and grand fir (*Abies grandis*). While feeding, the insect injects a chemical that stimulates abnormal growth that forms into a distinct nodule referred to as a "gout." The insect itself is covered in a waxy excretion that collectively gives an infested tree a white, fuzzy appearance. All BWA in North America are females that can reproduce without males. Young insects passively spread by being blown in the wind from one infested tree into new areas.



Photo Credit: Amy Gannon, Montana DNRC



Photo Credit: Amy Gannon, Montana DNRC

Balsam woolly adelgid is widely distributed in Idaho and was likely introduced into North America on infested nursery stock. It was first detected in Montana in 2007; no previous reports of BWA in Montana were on record at that time. The DNRC and USFS Forest Health Protection group initiated distribution surveys in 2010 to determine the extent of BWA in Montana and confirmed the insect in Broadwater, Flathead, Gallatin, Granite, Lewis and Clark, Lincoln, Mineral, Missoula, Ravalli and Sanders Counties. BWA has severely damaged subalpine fir throughout Idaho but we have yet to see the same scale of damage in Montana. Is it just a matter of time? Are

there differences in Montana's landscape or climate that might protect our subalpine fir? The DNRC is continuing the partnership with the USFS Forest Health Protection group to establish 12 long-term monitoring sites in Montana to better predict how BWA might impact subalpine fir here. Information gathered in this study will hopefully help us to anticipate and possibly mitigate any landscape-scale changes to Montana watersheds.

Currently, there are limited recommendations for landowners to manage infested subalpine fir on their property. Insecticides can effectively protect highly valued individual trees but it is critical to only use chemicals specifically labeled for BWA control. Removing infested trees is also beneficial however, the insects are very small and sparse at the early onset of an infestation which can make locating trees exceedingly difficult. While management options may be limited, it is nonetheless worthwhile to take a look at your subalpine fir to determine whether or not BWA is present and to better understand the ecology of your particular forested property.

Buying a Portable Bandsaw Mill has been like Winning the Lottery

By Clyde Robbe, Forest Steward Foundation Board Member and Northwest Montana Landowner

Located in the foothills of the Whitefish Range near Eureka, Montana sits the nearly 100-year-old Robbe family homestead and timberland property. Purchased and settled in the late 1920's and early 1930's, the landscape had good quantities of old growth Douglas fir, larch and ponderosa pine. With portable mill operations set up in strategic locations, Great Grandfather and Grandfather Robbe skidded logs to the mill sites and turned them into cants to be sold locally to support the growing railroad industry and other commercial operations where dimension lumber processing could further add value to the harvest.

Unfortunately, typical of that era, the saying "take the best and leave the rest" really did play out. Most all of the commercial timber was removed and what was left would most likely leave today's timber managers scratching their heads. Now, nearly 90 years later, on a significantly reduced footprint of the original 640-acre homestead, my wife and I are wrestling with how best to manage our 60-acre holding along with a brother who owns an adjacent 40-acre parcel. Recent wildfires bearing down and raining ash onto our property have heightened the awareness and need for ramped up forest management.



Typical view of the Robbe property crowded over-story, with the Whitefish Range in the background. Photo by Clyde Robbe

After the initial logging during the early years, the property was ultimately managed by my father, Wayne, and the Robbe family as Christmas tree lands with occasional timber sales as growth supported. Since those days (1950-1980's), and following loss of the family's patriarchs and matriarchs, the property has taken on an un-thinned look of crowded, often snow damaged and contorted stands of fir, abundant patches of juniper, and occasional larch and ponderosa. The oldest Douglas fir trees are barely 90 years of age, such that DBH's greater than 18" in the thick stands are far and few between.



Selective cutting of Douglas fir trees near the mill site. Photo by Clyde Robbe

Digging in our heels and not wanting a large scale timber sale operation to come in and completely change the landscape and character of the property, which we have been using for recreation and wildlife habitat in recent years, we had come to the conclusion that some level of timber harvest via small, carefully planned timber sales, along with our own non-commercial harvest and thinning activities, might be the way to proceed. So..... in the spring of 2018 we began walking the property with timber professionals to assess the potential for a small, commercial timber sale roughly 40-acres in size between the combined ownerships, and to lay-out an area to set-up a small band saw mill. The band saw mill would allow us to process some of the saw logs cut ourselves on site into dimension lumber and contribute to shed and out-building projects we had been envisioning.....And after a 90-year hiatus, the sounds of a sawmill would once again buzz through the trees. Though the timber sale planning is still in the works, with hopes of on-the-ground activity beginning in late 2019, the sawmill operation did get up and running this past summer and is the focus of this article, with intent of defining some of the characteristics of our small set up that might help others who are contemplating the purchase of a band saw mill.

Portable saw mill selection

With a little research and consultation with other mill owners, we set up a visit with a local dealer representative to see a mill in action and get a few minutes of hands-on operation with a mill having features that would be applicable to our own needs.....and budget! Though this story isn't meant to be an advertisement for any particular brand of portable mill, having a Wood-Mizer representative in Basin, Montana, only 30 miles away from our Butte home, allowed us to visit the manufacturer of our choice and an equipment display area without a lot of travel involved. We selected a portable mill rather than a stationary set-up as we felt the ability to reposition the mill on our own property quickly (or a neighbor's) if necessary, and its eventual resale attractiveness made more sense. We found it was invaluable to test drive the machines and discuss the various features of operation from more manual "hobby oriented" type of use, to feature laden hydraulic mills with higher production volumes and less operator handling needs. Since our planned small operation did not warrant the higher-end hydraulic type of log handling options, we settled on a more affordable size/capacity portable mill that included a "log deck" package, which allows the saw head to move the length of the log bed under power, and allows log positioning with hand cranks for turning the log and toe-heel boards for centerline adjustment. By the way, having my wife operate the mill during the on-site demonstration was a big help in convincing her that "we could really do this!"

Site Set-up

After placing an order for a Wood-Mizer LT28 early in the spring of 2018, we began prepping a site to set the mill on our property near Eureka. Even though our mill would be genuinely portable and could be moved around with ease on the property if necessary, our plan was to set up the mill in a level location where we could process logs brought in from the immediate area around our small cabin and mill site, and where old Christmas tree roads intersected, adding convenience to access the site from various corners of the property.



The 30 ft by 40 ft mill site lay-out with a footprint that will ultimately be covered by a mill/equipment timber framed storage shed. Photo by Clyde Robbe

Site set-up required some careful thought in advance to help define overall footprint size requirements for supporting log staging, log loading onto the mill bed with our small skid steer, ergonomic handling and piling of side slabs for later pick up and transport to the "firewood pile", temporary storage of flitches (boards requiring additional edge cuts to remove bark), and location (s) to store/stack/cure the dimension lumber as the final product. We found several on-line resources to help with site set-up but the general rule we found was that the fewer steps you have to take and eliminating any double handling of the logs or boards during production was most important. While it is possible to make your work area too "tight", convenience pays off

in big dividends by the end of a milling shift! We have found for our small operation of primary milling, flitch and slab handling, and final product stickering/stacking, a site dimension of 30'x40' is proving to be adequate. It also represents the area we are preparing to cover as part of a timber-framed saw mill and equipment shed. The footings for the shed have been poured, and the Douglas fir posts and horizontal framing members have already been milled and are curing in preparation for a spring 2019 "shed-raising party".

Saw mill operation and lessons learned

We found that operating the band saw had a very steep learning curve, especially once we were set up on our own property and were far away from the manufacturer representative's sharp eye, even though we had received several hours of excellent, comprehensive instruction for use on our own mill during initial hand-off to us. There are several things that have to be done and in the right sequence to keep you and your mill out of harm's way. A "few" of these, for instance, include properly securing a log or cant (i.e. log with the four sides removed) on the bed for milling, proper adjustment height of log/cant supports so you don't cut into them, making sure the blade tension swing arm is in the correct position, and having the blade lubrication system (water valve) set to the correct flow rate. Besides these items, there are several housekeeping items that need to be monitored to keep the log loading process and ultimate sawing into dimension lumber as smooth running as possible. More than one time I have left a pair of gloves, whisk broom or tape measure in a bad location along the saw head carriage rails, tripped on a chunk of bark adjacent to the log deck, or found the cant hook



The first log milled on the Robbe family property in nearly 90 years. Photo by Greg Robbe



A finished Douglas fir 6"x8"x12' timber ready to be stickered and weighted on the curing pile with other dimension lumber. Photo by Clyde Robbe

in the wrong place at the wrong time. Thankfully, as the number of milling shifts has increased, the near misses and possibility of cutting metal components that should not be cut have been reduced. That being said, a person never wants to get so confident in the process that he quits paying attention to even the minor details that help make for a safe and successful operation. It is important to always wear gloves and eye protection, and to double and triple check some aspects of the milling process ahead of activating the band saw blade and moving forward with the carriage!

Another item high on the list of "lessons learned" was defining the minimum and optimum saw log diameters to help make the time and labor associated with felling, bucking, transporting, milling and stacking the green lumber all worthwhile. For our little operation, it seems that any log less than 6" in diameter (small end, inside the bark) takes more time to mess with than what you ultimately get out of it, though I do get occasional 4"x4" post material out of these size logs if they are good and straight without sweep. Generally, logs less than 8" provide an abundance of firewood to be shared between the two wood burning stoves and fire pit we have on the property! As for an optimum log diameter, I am not sure we have been able to adequately evaluate what that would be, due to the relative young age of most of our harvestable timber. As mentioned earlier, cutting timber on our property with DBH's much above 18" is very limited. When we do get to work with a larger diameter tree, it is a real joy and almost seems like magic to see how many additional board feet (BF) we are able to mill out of a single log as compared to what the commercial saw mills are able to pay for volume. Using the Scribner Decimal C Log Scaling System, typical for scaling and payment on stands of northwest timber, it is not unusual for us to mill an additional 30-40% more BF from a 14"-16" diameter log than what the

Scribner method suggests is available. Of course, it takes some extra time and labor to extract those extra boards off the

outside edges of a log rather than just making four cuts and turning the log into a cant for further processing, but if you've got the time and determination to maximize the BF, and create less waste, it is very satisfying!

MAINTENANCE AND BLADE REPLACEMENT

Though we have barely gotten our band saw mill broken in, having sawn only a few thousand board feet of dimension lumber and framing timbers to date, according to our production and maintenance journal, we have tried to be diligent about keeping up with the minor maintenance the mill deserves. Cleaning the carriage system rails and log bed after each use, cleaning and lubricating the mill's chain drives with hydraulic fluid (recommended to us as it attracts less dust than oil), and hitting a few grease zerks now and then is about all that needs to be done with any regularity. Of course the mill's gas engine requires routine maintenance per the manufacturer's recommendations, and items like blade tension and blade alignment adjustment are well documented in the owner's manual and easy to accomplish for anyone mechanical minded in the first place. Generally, blade adjustment that may be necessary only comes after the replacement of a dull blade. Typically, we can get 8-10 hours of operation between blade replacements and have found that changing out blades is not as intimidating as what we initially thought it would be.

Also, thanks to the manufacturer's re-sharpening service by mail, when it comes time to send in a box of dull blades and break open our spare box (15 blades), the two-week turn-around time for blade sharpening will never be an issue for our small operation.



Greg Robbe lowers the mill front-end toe-board and prepares to rotate a 12 ft log for further milling into a 6"x8"x12' timber. Photo by Clyde Robbe



The saw mill crew for a day, Meg Robbe and Russ Weiss (and "Tika"), take a much deserved break from pulling slabs, flitches and finished boards off the mill. Photo by Clyde Robbe

A FEW SURPRISES AND PLANS FOR THE FUTURE

Aside from milling mostly green Douglas fir from our own property, we are hoping to find a source for some other types of logs, especially hardwoods like ash, walnut or maple, to turn into furniture projects in the future. Of course the anticipation for milling hardwoods comes with a need to upgrade the blade-type given the increased wood density, and we may wish we had a little more horsepower than just the 19 HP motor that came standard with our mill, but in limited quantities and cutting smaller diameter logs we should still do just fine. When we first started experimenting with the mill and getting used to its operation, I did cut some 6 foot lengths of dead-standing lodge pole "blue-stain pine" and milled it into beautiful one-inch and two-inch thickness boards that quickly became benches, headboards, night stands and countertops. At \$1.80 a BF at our local lumber yard, the 200 ft-plus BF of blue-stain pine lumber I milled was a nice way to break the mill in, and to begin justifying its purchase.

We have been impressed with how smooth the thin-kerfed band saw blades leave the wood surface, especially on the dry pine. Using coarse, then a finer grit sandpaper on a palm sander has produced finished wood surfaces with relative ease. Even on the green Douglas fir, we find the mill leaves quite an impressive

smooth finish, especially with a new band saw blade in place. Though we haven't added a planer or jointer to our wood finishing process, I can see those tools becoming must-haves down the road, especially if we get serious about our furniture building ideas, and there is opportunity to sell some lumber to potential buyers who are more demanding of the wood finish for their immediate needs.

Including the saw mill manufacturer that we selected, there are several brands on the market that will allow a person to get started with their own milling operation within the \$5000 to \$10,000 range. With a good supply of saw logs, perhaps from your own property, it is easy to see how the small portable mills can pay for themselves in just a few years, even if you are only producing dimension lumber for your own personal needs.....and imagination! Then there is always the possibility of an upgrade to a higher production, hydraulically operated mill as demand and interest in your finished products increases and you wish to turn the endeavor into more of a business opportunity. The testimonials I have read about selling well maintained and cared for mills suggests there is a strong market for the machines, and that starting small and upgrading when and if necessary does not turn out to be a daunting task.

OWNING A SAWMILL.....LIKE WINNING THE LOTTERY

A word of caution about purchasing and setting up a portable band saw mill on your property... it is very likely you'll suddenly find yourself to be very popular with your relatives, friends and neighbors! Akin to winning the lottery I guess. People that are interested in the woods product industry, or just genuinely fascinated with mechanical devices, find that watching a log transform into a stack of useable dimension lumber right before their eyes is time well spent. With the ability to meet specific length and thickness requests, I have provided ungraded boards for friends and family to make craft projects, benches, wall boards, framing lumber and have received one request to mill a fireplace mantel piece with strict length, width and height requirements. And for that shed-raising party we plan to have in the spring, I'll be happy to fire up the mill and make sure everyone that shows up to help goes home with a bundle of boards or pickup full of firewood slabs!

Save the Date

10th Annual Forest Landowners Conference

Date: April 12, 2019

Location: Copper King Inn, Butte, MT

For more information go to: <https://www.foreststewardshipfoundation.org/>

• We will be hosting a joint conference with Society of American Foresters (SAF) •

5th Annual Ties To The Land

Date: April 13, 2019

Time: 9:00am to 5:00pm

Location: Butte Business Development Center

Cost: \$50 for the first family member and \$10 for each additional family member

For more information contact Ed Levert at [\(406\) 293 2847](tel:4062932847) or at televert@kvis.net



Forest Health—Key Goals for Outdoor Recreation at Mount Dean Stone

By Glenn Marx, Montana Forest Stewardship Foundation Board Member

Executive Director, Montana Association of Land Trusts



Five Valleys Land Trust and The Nature Conservancy in Montana are teaming up to implement a Mount Dean Stone Forest Management Plan.

Photo Courtesy: Five Valleys Land Trust

Imagine preparing – and then implementing – a forest management plan for a 2,778-acre parcel featuring shared ownership of former industrial forestland that included mixed stands of tree species, scattered nearby residences, a desire to accommodate and expand diverse trails and outdoor recreation, with an added need to actively manage the vegetation for forest health and resiliency, and with an eye on opportunities to enhance wildlife habitat. Imagine all this activity and management was designed to occur on the edge of a large Montana city. Imagine that city was Missoula. Finally, imagine adjacent communications towers and equipment that are essential to Missoula and western Montana’s basic and emergency communications networks.

If you can imagine all that, you can imagine the challenges that faced the forest landowners – Five Valleys Land Trust (Five Valleys) and The Nature Conservancy in Montana (TNC) – and the contractor selected to prepare the forest management plan, Northwest Management, Inc.

The 86-page Mount Dean Stone Forest Management Plan was approved by the landowners in September 2018 with the intention of the landowners actively beginning implementation of the plan in early 2019.

“They (Northwest Management, Inc.) were great,” said Pelah Hoyt, Five Valleys Lands Director. “They were timely, and we’re pleased with the management prescriptions and direction. We feel we’re prepared for now, and for what’s ahead. Northwest Management was a great partner.”

The forest management plan, and the forest health management projects that await, will assist in the ongoing transformative management for the Mount Dean Stone area, which is south and east of Missoula proper, near Pattee Canyon Drive. The property, once owned by Plum Creek Timber Company, was sold to TNC as part of the Montana Legacy Project in 2008, in which TNC purchased about 310,000 acres of forestland from Plum Creek. While much of the original 310,000 has since been acquired by public agencies and conservation buyers, TNC remains a significant forest landowner in Montana, and has partnered with Five Valleys on the Mount Dean Stone property.

TNC is a national conservation organization with Montana offices in Helena, Missoula, Malta, and Bozeman, and in addition to forestlands owns a large preserve along the Rocky Mountain Front and a cattle grassbank in Phillips County. Five Valleys is a Missoula-based land trust that has been working with landowners in a wide area that includes Missoula County and the surrounding area since 1972 to conserve agricultural and forested lands and to provide public access with willing landowners. Five Valleys focuses largely on conservation easements, but in recent years – to better serve their community – has expanded their conservation efforts as landowners in Missoula, Lincoln, and along Rock Creek. They have successfully worked together with TNC before, in places like the Blackfoot Valley and Primm Meadow.

TNC has extensive experience in forest management, watershed conservation and wildlife habitat protection, and has worked with Northwest Management in the past. Five Valleys and TNC partnered-up to develop forest management objectives for the Mount Dean Stone property (see forest management objectives sidebar, page 11) that define not only the management options but the landscape objectives for the property.

“The Mount Dean Stone project partners will use the forest management plan to promote forest, grassland, riparian, and wildlife habitat health, while prioritizing forest restoration treatments that reduce wildfire risk to neighboring homes, ranches and communities,” said Steve Kloetzel, TNC Western Montana Land Steward. And in doing so will navigate through some tricky and sensitive issues. The forest management plan identifies a range of forest stand types and tree species, including Douglas-fir, ponderosa and lodgepole pine, and western larch, with the property largely dominated by young stands of even aged trees.

“The young stands of even aged trees that have established in these areas are generally in good health,” reads the forest management plan. “However, many stands have developed to the point that inter-tree completion is occurring and stand health is beginning to diminish. Desired seral tree species such as western larch, ponderosa pine, and lodgepole are declining in relative abundance due to an overabundance of the more shade-tolerant Douglas-fir.”

The forest management plan provides significant details for active management and delineates specific parcels that are a high priority for immediate treatment, including ways to address the dominance of Douglas-fir. In all, some 862 acres of the 2,778-acre property are recommended as high priorities for treatment, which includes a variety of measures to restore meadows, pre-commercial thinning for forest health, fuels reduction, wildfire hazard reduction and more.

“Forest restoration treatments will also take into account recreational and educational opportunities, as well as climate change adaptation,” said Kloetzel. “We’ll use the forest management plan to help prioritize and secure grants to carry out restoration treatments on this exciting open-space project.”

And throughout all the forest planning and forest management activity is the understanding that Mount Dean Stone sits on the outskirts of Missoula, with homes in close proximity, and trails – for family hiking and mountain biking – is a key recreational component to the property’s management.

“For us, throughout all the planning, it’s important to us that we be good neighbors,” said Hoyt. “That’s particularly true with forest management, and as we do we’ll recognize the human safety component. This was once industrial timberland with extensive roads and we want to maintain some roads for emergency vehicles and first responders and, if possible, as a safe exit route for neighbors.”

The Mount Dean Stone Management Plan is a kind of longer-term phase two by TNC and Five Valleys on the property’s overall management. The goal for the landowners is develop a broad five-year management plan that involves forest management and forest health, and also encompasses the outdoor recreation, grasslands, wildlife habitat and other community aspects of the property’s potential.

“The forest management plan and forest health improvements will help us shift the trajectory of the forest to healthier wildlife habitat through the way we implement the plan,” Hoyt said. “This is Missoula, and there can be some distrust about forest treatments being beneficial for forest health. We see implementation of this plan, and our management of the forest, as an opportunity to be part of the community conversation about forest management.”

The public has been, and will continue to be, involved in the property’s management and ongoing transformation. “Ultimately, we plan to marry-up the forest management goals with the overall goals of land ownership. We’d like to see the recreation plan, wildlife conservation, forest plan – all components of the five-year plan – moving forward within the same timeframe,” added Hoyt. “We want ownership and management of the property to be adaptive and responsive as we move forward, and offer a little more latitude for community members to be on the land.”

If you live in the Missoula area, or visit the area, soon you won’t have to imagine this forest management plan making on-the-ground changes at Mount Dean Stone. You’ll be able to watch it.



Runners on Mount Dean Stone, with Pattee Canyon in the background. Photo Courtesy: Tom Robertson

Mount Dean Stone Forest and Grassland Management Objectives

March 14, 2017

- **Forest Resilience:** Restore the historic forest structure and ecological resilience of low elevation dry mixed-conifer forests consistent with the ecological roles of natural, frequent, low-severity fire regime.
- **Reducing Wildfire Risk:** Reduce wildfire fuels and the potential for uncharacteristically high-severity wildfire while making neighboring homes and lands, including the Missoula community, more defensible to wildfire.
- **Climate Change Adaptation:** Promote landscape-scale structural complexity and vegetative characteristics that provide opportunity for native forests and grasslands to adapt to the challenges of a changing climate.
- **Grassland Health:** Maintain and improve the health of native grassland communities (Idaho fescue, bluebunch wheat grass) and shrubland communities (antelope bitterbrush, chokecherry, serviceberry).
- **Wildlife Habitat:** Maintain and improve habitat for big game species, such as mule deer and elk and for important non-game species, such as flammulated owls, pileated wood peckers and bats, by promoting and maintaining large-diameter ponderosa pine and recruiting large diameter snags. Identify and maintain habitat for any additional species of concern, such as pacific northwest tree frogs.
- **Riparian Health:** Improve the health of riparian systems, including woody draws and springs with intermittent stream flows, within and adjacent to the project area.
- **Weed Management:** Control the spread of non-native invasive weed species, especially new invaders.
- **Recreational Opportunities:** Use forest treatments to enhance landscape aesthetics and recreational opportunities.
- **Educational Opportunities:** Provide educational opportunities for students at local schools and the University of Montana as well as the general public that use forest treatments as an educational and outreach opportunity to improve the public's understanding of the value of conservation and stewardship of the Dean Stone Lands, including the beneficial role of ecologically-based forestry techniques.
- **Partner with Neighbors:** Collaborate with neighboring federal and state land management agencies and private landowners on forest resilience and restoration initiatives (Fire Adapted Missoula, the Cohesive Strategy, the Missoula County CWPP).
- **Improve Capacity:** Improve the capacity of the local public, NGOs, and private contractors to complete forest restoration activities on all land ownerships. This could include stewardship contracting that would make forest restoration work more affordable.
- **Promote Diversity of Natural and Human Values:** Engage with local stakeholders and user groups to ensure that forestry work promotes a diversity of natural and human values.

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The Forest Steward's Journal is a publication of the Forest Stewardship Foundation. Comments, articles, and letters to the editor are welcome.

Should you join the Forest Stewardship Foundation?

By joining us you become a part of a small but energetic organization that gets things done. We are all volunteers, but since 2011 we have been able to co-sponsor the Helena Landowner Conference and several "Ties to the Land" workshops. We have also contributed, as funding is available, to MSU Extension Forestry to help fund stewardship workshops. Plus, twice a year we publish and distribute over 1,300 Forest Steward's Journals.

We know money is tight, but our dues are still only \$25. We currently have 100+ members so you can do the math and see that we don't have much of an operating budget once we publish and mail the Journal. Your membership means a great deal to our continuing success. Please consider joining the foundation by completing the membership application form/envelope found in each winter's edition of the Journal.

We invite you to visit our website and welcome your comments and suggestions.

<https://www.ForestStewardshipFoundation.org>

Thank you sincerely for your help.

Ed Levert, Chair

