

MAY, 2013

Montana PLT Newsletter

Project Learning Tree

At PLT, we grow stewardship student by student, and we've been doing so for 35 years. Our award-winning curriculum resources help over half a million educators teach complex environmental issues. They can be integrated into lesson plans for all grades and subject areas to help students learn how to make sound choices about the environment. Our classroom curriculum resources help educators teach tomorrow's decision makers *how* to think, not *what* to think about the environment.



2013



Montana Project Learning Tree

Note from the MT PLT Coordinator, Cindy Bertek

2012 Conference Workshops

Thanks to the facilitators, 2012 was a great year for conferences. Full workshops were offered at several conferences around the state. Teresa Wenum and Patti Mason facilitated a pre-conference PLT Early Childhood workshop at the MT Association for Education of Young Children State Conference in Kalispell, 33 attended. Alyssa McLean and Christina Opegard facilitated a preK-8 workshop in Missoula at the conference for the 21st Century Community Learning Centers, 17 attended.

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2013 Workshops

There are plans in the works for several workshops for the Early Childhood and preK-8 PLT activity guides and well as for the Forests of the World. The Forest For Every Classroom incorporates PLT into its curriculum and is doing its sessions this year in the Missoula and surrounding areas. For more information go to <http://www.montanaeea.org/professional/AForestforEveryClassroom.htm>

University Students

We plan to include a preK-8 workshop for pre-service teachers and a special Walk in the Forest Workshop for the Forestry students. Often professional foresters are invited by educators like you to teach about the forest and trees. This workshop will introduce them to PLT and give them ideas for working with educators and youth in a forest setting.

Workshop Requests

A great way to bring a workshop to your school or area or during your schools PIR days is to put in a request. Give me a call and let me know what your interest is and if you have others who would like the opportunity to join in a workshop. PLT trained educators are welcome to attend multiple workshops. The themes and activities vary between workshops.

Project Learning Tree is a program of the American Forest Foundation
<http://www.forestfoundation.org/>

Potomac School goes for a “Walk in the Woods”

By Amy Helena, DNRC



2012 “Walk in the Woods” location

“ This is a great event to hold during Fest Products Appreciation Week“

Last October, 51 4th - 8th grader students from Potomac Elementary went for a “Walk in the Woods”. The Montana Society of American Foresters (SAF) sponsored the event, which was held during the Forest Products Appreciation Week.

The purpose of “Walk in the Woods” was to go to a rural community that still relies on active forest management and teach children the importance of sound timber management, the forests around them and the forestry professionals that implement the activities. Many of the kids in these communities are tied to the industry by their families. However few of them actually know what it is their family member does when they leave the house in the morning. Foresters and loggers tend to not promote what they do very well; in general they are doers not talkers.

The kids arrived on the DNRC state trust lands in the morning. They were split into groups with a mix of 4th-8th graders per group. Each group spent 30 minutes at each of six stations.

Stations included: **Surveying** section corner and bearing tree identification; **Forest Insects and Disease** identification and impacts; **Forester**, what a forester does and the tools they use **Tree and Native plant ID** species in our areas and historic conditions; **Logging Equipment and Logger Sports**, different machines used in forest

management, historic logging methods including hands-on cross cut saw demonstrations; and **Wildfire** firefighting equipment and how forest conditions affect fire behavior.

For an October day the weather started out great, the kids were happy, running to the different stations and asking great questions. By mid-morning it started raining and the wind began to howl. All the students and chaperones were troopers until the top broke out of a tree in an adjacent stand impacted by mountain pine beetle. It was time to make a break for the bus! After the wind died down and the rain subsided, trash bag raincoats were constructed and the last of the stations were visited. The day ended with snacks and Society of American frisbees distributed to each student.

Event organizers were happy with how it turned out. As we all know educational opportunities such as this would not be successful without the help of volunteers and actively engaged science teachers. “Walk in the Woods” was lucky enough to have both.

The 2013 “Walk in the Woods” is in the planning process. Event organizers are actively seeking out science teachers in the northwestern corner of the state that would like to have their elementary students participate. If anyone knows of a teacher who may be interested contact Amy Helena (406) 542-4331.

2013 Project Learning Tree Workshop Schedule

To view PLT workshops around the state, please go to:
<http://www.msuextension.org/forestry/mtplt.htm>

For questions or other information about workshops, or to request a workshop near you, contact MSU Extension Forestry office: 406-243-4706, cindy.bertek@cfc.umt.edu or log onto the website: www.msuextension.org/forestry/calendar.

PLT - Early Childhood Educator Workshop in Missoula

By: Christina Oppegard and Cindy Bertek

In 2010 Project Learning Tree (PLT) introduced an early childhood guide, *Environmental Experiences for Early Childhood* for educators that was designed especially for children ages 3 to 6. Over the past three years four early childhood workshops have been offered in with over 100 participants attending. On February 2, 2013 the first early childhood educator workshop was offered in Missoula. The workshop was opened to early education students, public and private preschool teachers, Head Start teachers, private child care providers, and kindergarten teachers.

Participants were introduced to the Early Childhood guide (Teachers Choice Award 2011) and various PLT materials and grant programs. The workshop began with an ice breaker activity where each participant had a tag on their back with the name of a particular product that was made or came from parts of a tree. (Activity 4 “We All Need Trees”) They had to ask others questions to try to determine what product they were which included berries, furniture, egg cartons, and food items that contained additives derived from trees i.e. gumdrops.



Identifying a pine tree outside of the Forestry Building on the UM Campus.

Next we went outside and visited some local trees and learned about how they grow, what they need to grow (Activity 9, “To Be a Tree”), and differences between trees by looking at their shapes, bark and leaves (needles) and by feeling the bark and needles (Activity 3, “Get in Touch with Trees”). We discovered what animals use the trees (Activity 10, “Trees as Habitats”). We looked at shapes, smelled tree needles (juniper is pungent!), and listened to the sounds around us as we took our walk. (Activity 1, “The Shape of Things” & Activity 2, “Sounds Around”)



Participant modeling an example of a table activity “tree costumes”.

Participant examples of “painting with evergreen brushes”

Inside we discussed and demonstrated activities. At one station we made nature vests out of paper bags and paper cut-outs of leaves and other items found in nature (Activity 9, To Be a Tree). At another station we did paintings using conifer branches and needles as brushes (Activity 6 “Evergreens in Winter”).

Discovery station activities give educators a working knowledge of the selected activities as well as tools to successfully integrate the activities in the guide to their present curriculum and promoting new ideas.

The workshop introduced topics to the educators and created understanding about the program, its use, and potential impacts on children’s environmental awareness and understanding. Providing content knowledge in several different ways to prepare the educators to use the PLT materials with the children by providing samples of teaching strategies and activities that will help children become aware of the environment around them.

PLT workshops are offered around the state by trained Facilitators, some are offered to focus groups such as schools and environmental education groups and others are open for anyone with an interest in getting their hands on some great teaching materials.

Note from MSU Extension Forestry:
Since 2008 when PLT was revitalized in MT, 415 educators, who reach upwards of over 1000 youth per year, have been trained in the use of PLT materials.

2013 PLT International Coordinator's Conference

By: Christina Opegard and Alyssa Mclean



This year's conference took place at the beautiful Grand Hotel Marriott in Clear Point, Alabama just minutes away from Fairhope. The hotel is part of the historic hotel of America known for its 66 year old legacy. The hotel owners, Retirement Systems of Alabama were ecstatic to host the conference and made sure those of us not from the south experienced that famous southern charm.

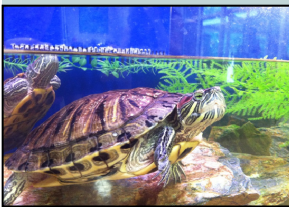
The conference committee lined up several fabulous trips, our first trip was to the Port of Mobile where experts from the Port Authority and the Alabama forest products industry lead us on a tour of the port. Here we had the opportunity to go over the revised "Forest of the World" module and improve on our international trade skills (Activity # 7, "Exploring the World Marketplace". We plan to offer a Forests of the World workshop within the next year in the Missoula area.

The second trip we went on was to the Steven W. Baker Sea, Sand, and Stars Science and Nature Center part of the Orange Beach School Middle School. There we explored a 5,800 gallon a aquarium with a large variety of fish, several tanks of sea creature, snakes, and turtles all native to the area. The facility has a 38 seat planetarium with a digitarium alpha II projector, computer technology room with 30 computer stations, an outside 800 foot boardwalk with four large outdoor gazebos classrooms where students will learn about birds, Amphibians, and insects. Also the center has a partnership with WKRG TV, a weather station, complete with measuring and monitoring technology, allows students to learn meteorology and then report the weather in front of a real television news set. (preK-8 Activity 84, "The Global Climate")

On our way back to Clear Point we stopped off at Orange Beach located at Gulf State Park where we enjoyed "the fruit of the sea" shrimp boil. A breath taking view of the ocean with white sanding beaches. We all enjoyed strolling along the beach before the

feast began. Alyssa and I especially enjoyed finding and identifying shells and jelly fish we found washing up to shore, can you tell we are educators.

The third trip was to Five Rivers, located in the gateway to Alabama's largest national natural landmark and the second largest river dealt in America. With over 250,000 areas of scenic waterways, woods, and wetlands that comprise the Dealt, there are several outdoor recreation opportunities in the dealt, such as kayak and boat tours (preK-8 Activity 54, "I'd Like To Visit A Place Where..."). We all had the opportunity to visit two learning centers on the property . The learning center featured live mammals, inserts, and reptiles to observe. The centers featured two mascots; a two year old training skunk and a 8 month old opossum. Both are very lovable and shy, but are always willing to help their trainer teach when visitors arrive.



Steven W. Baker
Sea, Sand, and Stars
Science and Nature
Center



Five Rivers
Learning
Center



In between all the educational trips we attended daily general sessions, concurrent sessions, interact sessions, and regional meetings. Also, each state that received at MPI grant in 2012 could show case a poster representing specific strategies and what they have accomplished with MPI grant funds. Montana's topic was our creation and implementation of our preK-8 Learning Trunks, we did not receive a prize however were in the running for one.

Overall, the conference was very informative and it was a vital opportunity to interact with national staff and other PLT coordinators, facilities, and steering committee members from other states. Alyssa and I walked away with a huge amount of information and tools to help us teach and facilitate PLT activities more efficiently.

The SUMO Science Club Walk in the Forest

By: Cindy Bertek

On a cool wet rainy day on the 1st of December, in the Bitterroot, twelve Daly Elementary 5th grade students, their three amazing fearless super leaders and teachers, one courageous father, and I went for a walk in the woods up Blodgett Canyon. These students are volunteer members of the renowned club known affectionately as the SUMO Science Club or "Students Understanding Massive Amounts of Science" (never mind that the acronym doesn't quite fit). The adventure began at the trailhead in the morning hours (which one of the valiant teachers, my daughter, managed to have me make three wrong turns and a few excursions to find). The students donned the fluorescent orange vests of the Forest Steward. They were awed and amazed at the weight of the vests and in curiosity began exploring the equipment in all the pockets.

The hike began and after a few hundred yards up the trail we stopped at the smokejumper memorial where the SUMO kids helped me enter coordinates to a nearby geocache into my GPS unit. (Note: **they** taught **me**.) A few SUMO's went the off in one direction with the majority working their way to the discovery of the geocache using their GPS units. One SUMO exchanged an elephant looking thing for spider from the cache. At that location the SUMOs discovered six species of conifer seedlings growing in a previously burned area. They also noted some mistletoe in the tall Douglas fir tree (preK-8 Activity #77, "Trees in Trouble")

Up the trail the SUMOs hiked over rocks, snow and ice until they found a dense stand of six foot tall lodgepole pines. Around a boulder and down the slope, we crawled through the trees to stand in a small opening with a big ceonothus bush (the seeds are viable over 300 years). Here

we discussed what trees need in order to grow and what the stand might look like over the years if it was thinned or not thinned. The SUMO's had a competition for poker chips (representing water, sunlight, nutrients, and (oh no!) beetles (preK-8 Activity 27, "Every Tree for Itself").

Further up, the SUMOs measured a huge ginormous ponderosa pine using clinometers and a loggers tape. Then, the SUMO's slipped and stumbled back down the trail where they ended their adventure by boring a few trees to inspect the growth and age then roasting some soggy but yummy s'mores over a nice warm campfire. I stand corrected, "The s'mores where NOT soggy! Only the kids where!"

This walk was planned using PLT lessons and "Walk in the Forest" For more information on planning your own walk in the forest check out:

<http://www.forestfoundation.org> or search online for "forest foundation walk in the forest".

K-8 Project Learning Trunks

Educators, bring the forest to your classroom with a PLT trunk



Trunks include:

- PLT Lessons
- Billy B. Sings about Tree's CD
- Labeled Cones
- Wood Products
- Posters
- Books
- Tree Cookies
- And much more

**For more information contract
Christina Oppgaard, 406-243-2773 or
Cindy Bertek, 406-243-4706,
cindy.bertek@cfc.umt.edu
to reserve a trunk.**

Foy's Community Forest, Kalispell MT

<http://www.foystoblacktailtrails.org/>

By Jim Watson

(Note from Coordinator: The Foy's Community Forest offers the over 100 educators in the Kalispell-Flathead county region who are trained in PLT a great place to take students to learn in the woods. I hope you can all find a way to use this great resource as well as the Lone Pine State Forest area nearby.)

The Community Forest is only a few miles from several schools and represents an ideal opportunity for Project Learning Tree. A high priority is to design a classroom in the woods specifically to serve PLT. Herron Park has an ample parking lot and two vault toilets. School buses are already a common sight at the park. The Society of American Foresters, led by Lorrie Woods, is assisting in developing a one-mile interpretive trail for schools and families. We also hope to engage students in a wetlands planting project that will increase diversity along the interpretive trail.

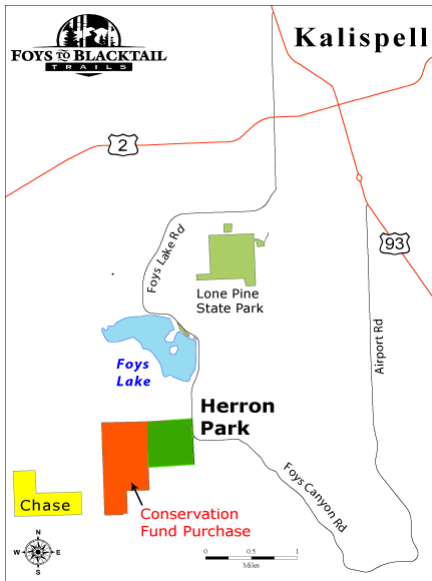
Thanks to a \$400,000 grant from the US Forest Service announced in August 2012, Northwest Montana is going to have a Community Forest dedicated to education, recreation, public access and forest products. Flathead County and the non-profit Foy's to Blacktail Trails (FTBT) have been working on the Foy's Community Forest project since 2007. To date FTBT has purchased and donated to Flathead County 150 acres of a 320-acre timbered parcel. An additional 110 acres will be purchased in July 2013 with the USFS grant and additional private funds, leaving only 60 acres remaining to be secured. The project is adjacent to county-owned Herron Park near Foy's Lake (3 miles from Kalispell).

So far over a million dollars has been raised and spent, not including the Community Forest grant. Funding partners are Montana State Park's Recreational Trails Program (\$295,000), Montana Fish and Wildlife Conservation Trust (\$120,000), and Flathead County (\$100,500). These public funds have been matched by private donations of \$518,500.

2012 was the first year for Community Forest grants, and the Forest Service awarded only ten grants nationwide. The Forest Service was looking for projects that would serve as national models, support local timber industries, support public recreation, access and education, and protect working forests from conversion to other uses. They were especially looking for projects that demonstrated strong local support. Foy's Community Forest has all of these attributes, and truly excels in community support. The list of supporters and partners is far too long to list here but includes conservation, recreation, education, and timber interests. Support from MT Forest Stewardship, MT DNRC Forestry, Stoltze, Plum Creek and Tree Farm was instrumental in securing the grant.

The Community Forest land will be encumbered by a permanent deed restriction that requires the property to remain in a forested condition, not subdivided or developed, and managed according to an approved forest management plan that must be reviewed every five years. Though not complete yet, it is expected that the plan and forest will be certified and monitored by Montana Tree Farm and DNRC.

Historically a working forest, The Foy's Community Forest is heavily used for recreation. In addition to land purchase, FTBT and its community partners have invested at least \$100,000 in designing, building and improving a multi-user, multi-season trail system on the property. On average, 100 people use the project area each day, year round. Because of its accessibility, the project area is ideal for forestry education. Many of the trail users are from urban backgrounds and know very little about working forests and active forest management. Some live in town and many live on 5-10 acre subdivision lots that were once working forests. These small-acreage landowners typically want the



benefits of living in the forest, but due to lack of knowledge, are afraid to actively manage their timber. This leaves their properties at risk for fire, insect and disease damage. We can use the Community Forest to teach them how to manage their property, and to teach their neighbors in turn.

For adults and landowners we plan to develop a walking podcast tour. Visitors will go to mapped locations in the forest and use smart phones to “click” on a sign to hear each segment. The tour will be a series of college level discussions on land management issues centered on forestry and wildlife habitat. We will have foresters and biologists go to interesting locations in the forest and discuss (even argue about!) how that location could be managed. This process will highlight the complexity of land management decisions and how some landowner goals can conflict with others. FireWise management and living in the Wildland/Urban interface are integral components.

We hope to secure a FireWise grant to do a fire thinning operation that will demonstrate a before and after picture. We will invite the public out to explain the prescription parameters and to actually watch the operation.

The potential for community outreach to teach forestry management is very rich. The non-profit Foy’s to Blacktail is a volunteer organization focused on land purchase and recreation. They do not have the expertise or capacity to develop and manage the educational aspects of this Community Forest. A new team with the necessary professional qualifications and a passion for education and public interpretation is essential to planning and implementation. Gary Ellison is writing the management plan that must capture the future potential of this Community Forest. The most pressing immediate need is for innovative people to envision what the PLT interpretive trail should look like and how to make it happen. Foy’s to Blacktail Trails can supply grant writers, but these writers need a professional vision and plan to write about.

In short, we ask **you** to get involved in what is becoming a nationally recognized Community Forest. The project is at early stage and needs your guidance and expertise to achieve its full potential. Your comments, suggestions, and time are most welcome. Please contact Jim Watson, Jim@SpringBrookRanch.com

Forest For Every Classroom

By Lisa Bickel

<http://www.montanaeea.org/professional/AForestforEveryClassroom.htm>

A Forest for Every Classroom, a teacher professional development program in Western Montana, welcomed 19 new kindergarten through 8th grade teachers into the year long program this past spring. Designed to help teachers blend local topics into their curriculum, FFEC is a cooperative program guided by educators and staff from the Montana Natural History Center, US Forest Service, Montana DNRC, Montana Fish and Wildlife, Montana Forest Restoration Committee, Arthur Carhart National Wilderness Training Institute, the University of Montana, and Montana Project Learning Tree. Through the 11 days of training spread out over the four seasons, teachers are introduced to Montana's natural history, cultural history, local economics, forest stewardship, and forest economics. They explore ranching in the Blackfoot Valley, fisheries in the Bitterroot, visit Pyramid Mill in Seeley, listen to Salish elders, and get to know the long history of our region. The teachers then take these experiences, armed with training in Project Learning Tree materials, and develop unique place-based curriculum units for their students that incorporate service learning and community connections. Our current teachers are from schools in Victor, Ovando, Bonner, Missoula, St. Ignatius, and Hamilton.

Lisa Bickell, Education Director, Montana Natural History Center, www.MontanaNaturalist.org 406.327.0405

Grant Opportunities



Up to \$3,000
available

Apply by
Sept. 30th

GreenWorks! is a service-learning, community action grant program for partners educators, students, and communities to undertake environmental neighborhood improvement projects. Taking environmental education from the classroom to action strengthens students' understanding of complex environmental issues. Since 1992, PLT has distributed nearly \$1 million to fund 1,000 environmental projects in communities across the country.

Application Requirements

PLT GreenWorks! grants are available in two award levels. To qualify for the first level at a maximum grant amount of \$1,000 you must meet the following grant requirements.

- 1) Applicants must have attended a PLT workshop
- 2) The proposed project must involve service-learning
- 3) The proposed project must exemplify student voice
- 4) The proposed project must involve at least one community partner
- 5) The proposed project must secure at least 50% matching funds (in-kind acceptable)

PLT GreenWorks! grant funding is also available to those schools registered on the PLT GreenSchools! website, www.greenschools.org. Grants awarded at this level are for a maximum of \$3,000. In addition to the above grant requirements, applicants must also meet the following criteria to be eligible for grants up to \$3,000.

- 1) Applicants must be a school (public or private)
- 2) Applicants must be registered on the PLT GreenSchools! website (It's free!)
- 3) Applicants must have established a Green Team
- 4) Applicants must have completed one of more of the PLT GreenSchools! Investigations
- 5) The proposed project must be based on the findings of one or more of the PLT GreenSchools! Investigations

For more details and application go to, www.plt.org/apply-for-greenworks-environmental-education-grant

People Made a Difference!

In 2012 we had 104 educators trained at 8 workshops in Montana. Participants have a sum of 459 years of experiences and reach 1,049 youth per year. 100% approval rating on our workshop evaluations, 90% of attends say they plan to use PLT materials daily, weekly, or monthly.

As a rependant of a MPI Grant through Project Learning Tree we have had the opportunity to launch several new projects that allow us to offer materials to increase life-long learning and additional resources to our PLT educators and facilitator's.

Also we would like to thank our fellow supporters and donors who without their support our program would not be possible. MSU Extension Forestry, U.S. Forest Service, Montana Department of Natural Resources and Conservation, Montana Natural History Center, MT Women in Timber, MT Office of Public Instruction, Montana Early Childhood Project, The University of Montana Western, University of Montana, and Montana Department of Fish, Wildlife and Parks.

Contribute Today!

Name: _____

Yes, I want more students to learn outdoors. I am investing in Project Learning Tree today!

Donation Amount: _____

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