# Colorado Tree Farm Tour Guidebook

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# Tree Farm Tour Guidebook

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# Acknowledgements

The Colorado State Tree Farm Committee would like to thanks a number of organizations and individuals for helping to make this guidebook possible.

First, we wish to thanks the American Forest Foundation for providing funds to develop projects that inspire private, non-industrial forest landowners to continue their efforts to improve the health and sustainability of this nations forests. Many Tree Farmers in Colorado don't make enough in income from their Tree Farms to break-even each year. However, they keep working because they love their forests and wish to leave them as sustainable legacies for future generations. AFF continually reminds us of our long term goal and makes our efforts in the short term a little more palatable.

We would also like to thanks the Colorado State Forest Service and all its members who have often gone beyond the call duty to assist our Tree Farmers in ways too numerous to mention. Particular thanks go to:

- Mike Hughes, Fort Collins District Forester
- Ann Randall, CSFS Volunteer Coordinator
- Krista Javonorok, CSFS Volunteer Staff
- Shawna Crocker, CSFS Project Learning Tree Coordinator

for specific help in developing this guide.

We must thank the many Colorado educators who volunteered their time and expertise to explain how Tree Farmers might best work with teachers for the benefit of our children and the public at large. Special thanks here goes to:

- Carol Fortino, PH.D, University of Northern Colorado
- Gerry Saunders, PH.D. University of Northern Colorado
- Mandy Rogers, PLT Coordinator
- Brian Olver, Science Coordinator, Poudre School District
- Bob Kulovany, Principal Stove Prairie School
- John Opdahl, Teacher, Stove Prairie School

We last we must thank the many Tree Farmers throughout are state who have contributed to the development of this guide and who will use it to inspire a wonder of nature in countless children for years to come.

# Introduction

#### Our Goals

One of our goals in creating this guidebook is to help students and educators understand the benefits of sustainable forestry as practiced by Tree Farmers. We have worked closely with many educators in Colorado to find activities that will increase that understanding.

Our further hope is that children who become knowledgeable with regard to sustainable forestry activities will become our ambassadors to the public at large. Children have a tendency to display newfound knowledge to the adults around them. If any of the children, that take your tour, can later correct an adult misconception about Tree Farming or sustainable forestry activities, you will have done a good deed for our forests.

Another goal is to help create a learning experience for students, teachers, and Tree Farmers that will be enjoyable, memorable, and worthwhile. For students, we have chosen activities that have proven to increase their understanding without dull lectures. For teachers, we have tried to provide an experience that will supplement the state and district standards that they are required to use and give them a break from the classroom. For you as a Tree Farmer, we hope that sharing the wonder and enthusiasm that students exhibit when discovering new ideas will increase your own wonder and enthusiasm as you continue your efforts to improve the health and sustainability of our forests.

## **Getting Started**

The first step in getting a tour started is to understand the activities available. You probably won't include all the activities that we provide here, but you should be able to explain them to the teachers who should help you decide which activities will work best with their class' current curriculum. Please read through the activities in the following pages and imagine how they might be conducted on your property. Try to anticipate some of the questions that teachers might ask you. If you have questions about any activity, please call one of the committee members listed in the appendix and discuss them with us before contacting teachers.

The next step is to line up some local experts who will be willing to volunteer to help you conduct your tour. Your district office of the Colorado State Forest Service is a great place to start. We have notified all district offices of this program. Other local Tree Farmers are often willing to help. Forestry students or even professors at your local college might be interested. Be sure to contact the Colorado State Tree Farm Committee, too. Committee members and CSFS offices are listed in the appendix.

# **Contacting Schools**

#### Who to contact first

Once you understand how the activities in this guide can help students understand why you work so hard in the forest, and you have enlisted the help of others who can help you implement these activities, you're ready to contact your local school. Unless you know of a particular teacher who is interested in your tour, however, you will probably not have good luck contacting individual teachers about tours.

Teachers are swamped with more information about activities than they have time to read. So, they often rely on word of mouth from other teachers to determine whether an activity is worthwhile. We have tried to anticipate the problems you might encounter enlisting the help of teachers by notifying school districts and particularly the science coordinators in school districts about our tour program.

If you contact the Science Coordinator in your school district first, they can suggest the idea of a tour to the various teachers, distribute handouts on your behalf, and maybe even organize a meeting where you can make a presentation to interested teachers. We would have liked to include a list of Colorado school districts and their respective Science Coordinators or their equivalents, however, the list is much too long. Please check the white pages of your local phone book for the number of your local school district or yellow pages under Schools-Academic for individual schools.

#### **Using Project Learning Tree**

The activities used in this guide have been developed by Project Learning Tree. All the activities in this guide emphasize the development of critical thinking and problem solving by providing hands on opportunities for students to discover scientific explanations of natural phenomena by working together in the field. Each year nearly 60,000 educators attend PLT workshops to learn how to use the program with young people. Many teachers in your school district may be familiar with or have used the Project Learning Tree environmental education program. If there is a PLT coordinator in your area, they may be able to assist you in making presentations to interested teachers. You should consider taking a PLT workshop yourself. PLT contacts in Colorado are listed in the appendix.

# Making a presentation to interested teachers

## Complimenting curriculum and state standards

We have provided a "Teacher Handout" in the appendix that can guide you in making a presentation to your local educators. It will be important to emphasize how our activities supplement and reinforce the standards and curriculum that the teacher is probably using. Most teachers will want to understand, and perhaps be involved with, all the particulars of the tour. Be sure to highlight the idea that you want the teacher's input and advice in planning the tour. This guidebook provides a variety of choices that you and the teacher should make together.

For instance, all teachers in Colorado must follow state standards when developing the curriculum they use in their classroom. Many school districts incorporate the state standards into more detailed district standards. When teachers evaluate activities outside the classroom, therefore, they will look for those activities that incorporate the standards that they must follow in the classroom. All the PLT activities in this guide meet this state's standards.

However, the time of the school year when a teacher may choose to teach a given portion of the curriculum may vary. Some teachers may wish to reinforce curriculum currently under discussion with outside activities. Others may be happy to find an opportunity to remind students of subjects covered earlier in the year. By maintaining some flexibility of choice between activities, you will find more teachers interested in taking your tour when it is most convenient for you to provide it.

#### **Anticipating concerns**

Any movement of children in and out of a classroom can cause a teacher concern for the safety and well being of her charges. If you can exhibit an empathy with those concerns and knowledge of the actions needed to alleviate them, you will assure the teacher that your tour might be an enjoyable experience for her as well as her students.

The remainder of this guide will provide suggestions that should anticipate most of the potential problems you and a teacher might face organizing and conducting your tour.

# Working with a teacher to plan your tour

It is important to remember that without teacher cooperation, your tour will not be successful. Teachers are responsible for the well being of their students during school hours and they will want to know about and/or help to make the arrangements for the tour.

In order to get the most cooperation from the teacher you will have to understand and anticipate the teacher's concerns. If you are prepared to present a tour package that addresses these concerns, it will mean that the teacher will have less to worry about and will be more likely to approve your plan. This guidebook will attempt to address the primary concerns of most teachers when taking their students outside the classroom.

However, you must be prepared to be flexible in your planning. Some schools will have strict guidelines of their own regarding travel arrangements, consent forms, etc. Ideally, you will want to be prepared to suggest arrangements, negotiate compromises between your ideas and the school's, and then complete as many of the arrangements for the tour has school policy will permit.

So, let's look at some of the things that, if anticipated, will insure a safe and enjoyable experience for the students, the teacher and you.

## **Group Age and Size**

## Age Concerns – choosing the appropriate activities.

Determining the age of the group is of primary importance. Kids will be kids and if they are not engaged and entertained by the tour activities they will tend to disrupt the activities with complaints or find something more enjoyable (and possibly less safe) to do. The activities listed in this guide will cover a variety of age groups from K through 6. If you can arrange to have a particular grade attend your tour, you can choose activities from those suggested later in this guidebook that have been designed and proven to hold their interest.

It is possible to mix age groups on a single tour, but it will be considerably more complicated to plan and carry out. We suggest that you choose the activities intended for the age group interested in touring and make sure that the teacher thinks that they are appropriate.

## Size Concerns – determining how much adult supervision is needed.

Group size is important because without adequate adult supervision, even the best kids can find trouble. You will want to discuss with the teacher just how many adults will be needed to adequately supervise the students in the field. Try to enlist interested Tree Farmers who can answers any questions about Tree Farming that could arise. Don't over look parents either. Not only will they be conscientious supervisors, but their presence on the tour will give you a chance to explain how your work improves the health of the forest.

# **Travel Arrangements**

Travel arrangements are most important because you may not have much control over them. Many schools insist upon using school buses to transport students. The benefits are:

- In case of accidents, the buses and drivers are insured.
- Drivers are trained to transport large groups of children.

The drawbacks are:

- Bus transportation is expensive and funds may not be available.
- It may not be easy to schedule travel time when it is most convenient.

You should discuss various alternatives for transporting students with the teacher. Smaller mountain schools may help you organize parents to drive, as well as help supervise, during the tour.

Keep in mind that certain types of vehicles may have access problems to your farm. If you can envision an access problem due to narrow, winding roads or potential weather conditions, make sure you discuss them with the drivers that you plan on using. A forest tour that leave students stranded on the road, cannot be considered a successful tour.

## Length of Stay

Be sure to develop a time schedule with the teacher. Most teachers will insist upon this but you should not leave it to chance. Starting time and length of stay can determine the need for many other considerations such as:

- Lunch and/or snack arrangements
- Toilets
- Water stations
- Shelter

Also be sure to allow for adequate transportation time to and from your farm. Even professional drivers can miss schedules, so don't plan too tightly. This is very important. You may have the most interesting activities planned with top-notch experts on site, but, if the children are uncomfortable, hungry or thirsty, you will definitely not have a successful tour.

#### **Consent Forms**

Parents must be informed of your tour. A suggested consent form can be found in the appendix of this guidebook. It describes a Tree Farm tour in general terms. Discuss using it with the teacher. It provides a brief but comprehensive description of the tour.

# **Safety Concerns**

The possibility of a student being injured during the tour in your property is real. Schools are insured against liability in case of an accident. However, you as the owner of the tree farm may be liable in case of gross negligence in your part or any person acting as your agent. (Please consult your attorney for legal advice).

We have investigated the necessity of obtaining "event insurance" for the tours, and have found that type of insurance is very expensive for the risks involved. Some tree farmers have what is called in the industry an "umbrella policy" that covers liability above the usual homeowners liability. This type of insurance is very reasonable, costing in the neighborhood of \$150.00 per \$1 million of coverage. This would be a good time to consult with your insurance agent to determine what coverage is adequate.

Besides insurance, there are other things that can be done to lower the risk of accidents, and to make the tour a safe and enjoyable event. Teachers should be involved in arriving at the safety precautions to be taken, and if possible they should be given a physical tour of the facilities before hand to determine what actions are necessary. Below are some suggestions that may be implemented to assure a safe environment.

- 1. Rope off all danger areas, including machinery, log piles, water impoundments etc.
- 2. "Keep-off" signs should be erected to prevent children from venturing into areas that may dangerous
- 3. Signs and arrows indicating the paths and locations of individual "stations" should be installed so participants know exactly where to go and what trails to follow. Caution signs should be posted where stumps or low branches or other impediments may cause persons to stumble and fall.
- 4. Determine the response time of the local fire and rescue department, and insure that they know precisely where the event is taking place. If possible invite them to participate in the event and provide information about forest fires
- 5. Do not leave tools and equipment laying in areas where they may hurt children.

One thing to keep in mind, an accident free event is no "accident"

# **Suggested Activities**

The Colorado State Tree Farm Committee did a great deal of research in an attempt to find activities for Tree Farm tour participants that would be both educational and enjoyable for various age groups. After talking to educators throughout the state, we decided that creating our own activities would be like reinventing the wheel with one hand tied behind our back. That is because an organization called Project Learning Tree has been working for years with input from hundreds of educators to develop many of the activities for which we were searching.

Project Learning Tree's mission is to work within our schools to provide teachers with the educational tools necessary to increase students understanding of the environment. PLT has designed a comprehensive, activity based education curriculum that can be used by teachers in the classroom. But, fortunately for us, many of the PLT activities are designed to take advantage of outdoor settings.

Some of the Tree Farmers working on this project were invited to participate in one of the PLT workshops for student teachers at Northern Colorado University. We discovered that many teachers throughout the state have taken one or more of these workshops and are familiar with and trust the PLT approach to teaching.

We also discovered that the activities are a lot of fun and are not difficult to conduct, although we highly recommend that you work with a Tree Farmer or a teacher who has taken the PLT workshop for your first tour. You might also check with Colorado's PLT Coordinator for one day workshops which you might attend. (see the appendix)

The following activities have been tested by the Colorado State Tree Farm Committee. Normal everyday Tree Farmers have used these activities with children on Tree Farm tours. The children tell us that they love them. The teachers tell us that they love them, and the Tree Farmers tell us that working with the children was one of the most enjoyable experiences they have had in Tree Farming.

PLT Activities (see Appendices #5 -#11):

- Forest for the Trees #69
- Tree Factory #63
- Trees In Trouble #77
- Living with Fire #81
- Trees as Habitat #22
- Tree Treasures #12
- Renewable or Not #14

# Follow up Evaluations

Although you can usually tell if a tour is a success or not, you will often be surprised at the insightful suggestions children can give you to improve the experience. Ask for tour evaluations from both the teachers and the students. This can be done at the end of the tour or as a follow up classroom activity. Tell the students and teachers that you want to make each tour as enjoyable as possible and that you need their help to do that. You should ask what activities were most informative and enjoyable and which ones needed to be improved. Ask for suggestions on how to improve the tour. You will often be surprised and delighted with the reactions you get. Get the evaluations in writing, if possible, and please share your results with the Colorado State Tree Farm Committee so that we can revise this guidebook with the very best ideas.