## Welcome to the 2023 FRPA Conference!



# August 28 - 31, 2023 | Orlando, FL

# WE'RE ALL CONNECTED: USING PROJECT LEARNING TREE (PLT) TO ENHANCE EVENTS

### August 31,2023



### Dana Sussmann

Senior Forester, Florida Forest Service Orlando District



### Leah Glynn

PLT Assistant, Florida Project Learning Tree



# **MEET OUR SPEAKERS**



#### Dana Sussmann, Senior Forester, Florida Forest Service Orlando District

Dana began her career with the Florida Forest Service in 1989 in South Florida and relocated to Central Florida in 1994. In this role as a Cooperative Forestry Assistance forester, she provides rural forestry assistance to landowners in Orange, Osceola, Seminole, and Brevard counties. Additional job responsibilities include urban forestry assistance to local communities and environmental education. She received a Bachelor of Forest Science from the University of Illinois, Urbana-Champaign, and is a Project Learning Tree Facilitator, International Society of Arboriculture (ISA) Certified Arborist, and Florida Certified Prescribed Burner.

#### Leah Glynn, Florida Project Learning Tree Assistant



Leah Glynn is a graduate student at the University of Florida within the School of Forest, Fisheries, and Geomatics Sciences, studying Forest Resources and Conservation, with a special interest in Recreation Science and Environmental Education. Leah earned a bachelor's degree in Natural Resource Conservation from the University of Florida in May 2022, and will graduate with her master's degree in May of 2023. Leah is working as the Florida Project Learning Tree Assistant and has enjoyed learning more about environmental education and providing professional development trainings for educators and PLT facilitators across the state. From a young age, Leah has had a passion for recreation and hopes to work to make the natural environment a more inclusive space while also providing quality educational programming in underserved communities.

# LEARNING OBJECTIVES

 Explore what PLT Offers
Experience a PLT Activity
Share ideas for incorporating PLT activities into your next event
Learn about resources and support offered by PLT



# **Icebreaker: We All Need Trees**

### Connecting Kids to Nature

Nature is a great teacher and getting kids outside to learn and play is good for their brains and their bodies. Try this outdoor activity from Project Learning Tree® - it's safe, fun, and educational!

#### We All Need Trees

Children are often surprised to learn how many different products we get from trees. Use this activity to help children learn just how much we depend on trees in our daily lives.

Take a walk with children, and bring along a daypack filled with a few tree products, for example, fruit (e.g., apple, orange, banana), a pencil and a journal or a book, sunblock, and chewing gum. Pick up a downed tree branch and ask where it came from (a tree). Eat the fruit, and ask children where it came from (a store? a tree?). Ask children to think of other items that come from trees. Discuss some unusual tree products, using the samples from your daypack. Ask critical questions, including:

· Have you used anything that comes from trees today? · How are tree products alike and how are they different? · What do you like most about trees?

In addition to giving us wood, paper, food, and other products, trees are invaluable assets to our communities. Take a neighborhood walk, and look for newly planted trees and shrubs. How are they protected? Find a place without trees, and compare it with a place with many. Which place do you like best? Why?

For a children's story about the gifts of trees and our responsibility to care for them, check out The Tree Farmer by Chuck Leavell and Nicholas Cravotta, 2005, ISBN: 1893622169.

Complete this word search puzzle to discover ten tree products. Look below for the answers.

A	U	R	A	Т	T	U	G	1	
т	P	E	т	0	S	В	Е	L	
т	0	P	A	С	н	0	N	1	
Е	Т	A	L	0	С	0	Н	С	
Ρ	Е	P	U	E	н	к	D	N	
Ρ	0	S	Т	С	A	R	D	Ε	
U	E	W	Е	N	1	W	1	Ρ	
т	Е	Е	R	S	R	0	т	н	
С	1	N	Ν	A	M	0	N	С	



DID YOU KNOW THAT TREES ARE USED IN 5000+ PRODUCTS? Here's a small sampling of items...





Aspirin
Ice cream
Skateboards
Cell phones
Diapers
Bug repellant
Bandages
Fishing tackle
Laundry detergent
Crayons
Paint
Football helmets
Fireworks
Glue
Sports drinks
Shoe polish
Soap
Cosmetics
Concrete
Lotion
Toothbrushes
Rayon
Fragrances
Mulch
Paper
Tissue

Boxes	Cough syrup
Cleaning supplies	Shampoo
Flavorings	Dish washing liquid
Eyeglass frames	Orange soft drinks
Carpet	Pine cleaners
Plastic twines	Теа
Computer casings	Rootbeer
Luggage	Chewing gum
Cellophane	Fat-free foods
Baby food	Salad dressings
Cereal	Lip balm
Cork	Coated pills
Fabrics	Car wax
Poultry bedding	Furniture finishes
Oil spill control agents	Spices
Concer drugs	Syrup
Cancer drugs	
Musical Instruments	Liquid smoke
Musical Instruments	Liquid smoke
Musical Instruments Baseball bats	Liquid smoke Turpentine
Musical Instruments Baseball bats Charcoal	Liquid smoke Turpentine Tires
Musical Instruments Baseball bats Charcoal Canoe Paddles	Liquid smoke Turpentine Tires Asphalt
Musical Instruments Baseball bats Charcoal Canoe Paddles Guitars	Liquid smoke Turpentine Tires Asphalt Toothpaste
Musical Instruments Baseball bats Charcoal Canoe Paddles Guitars Swing sets	Liquid smoke Turpentine Tires Asphalt Toothpaste Hot chocolate Ping pong balls Whole grain bread
Musical Instruments Baseball bats Charcoal Canoe Paddles Guitars Swing sets Crutches	Liquid smoke Turpentine Tires Asphalt Toothpaste Hot chocolate Ping pong balls

Crayola





# What is PLT?

Project Learning Tree<sup>®</sup> (PLT) is **an award-winning environmental education program** designed for teachers and other educators, parents, and community leaders working with youth from preschool through grade 12. PLT is an initiative of the <u>Sustainable</u> <u>Forestry Initiative</u> (SFI).



#### PLT'S MISSION

- To advance environmental literacy, stewardship, and career pathways using trees and forests as windows on the world.
- To achieve this mission PLT:
- Provides students with the **awareness**, **appreciation**, **skills**, **and commitment** to address environmental issues.
- Enables students to apply scientific processes and higher order thinking skills to resolve environmental problems.
- Helps students acquire **an appreciation for and tolerance of diverse viewpoints** on environmental issues and develop attitudes and actions based on analysis and evaluation of the available information.
- Encourages creativity, originality, and flexibility to resolve environmental problems and issues.
- **Inspires and empowers students** to become responsible, productive, and participatory members of society.









# **PLT Teaches Youth**



### **Project Learning Tree**

Teaches youth: HOW TO THINK, NOT WHAT TO THINK

About complex environmental issues







Uses the outdoors as a classroom to encourage a connection with nature



# What is SFI?

### What is Sustainable Forestry Initiative?

An organization which:



Promotes sustainable forest management (including urban forests) Provides a framework to satisfy growing demands for responsibly produced wood products Supports educating and connecting youth to forests and the outdoors





# **Hands-On Activities**





# You Try It! – Web of Life





# **Example #1: Pollution Search**

Levels

Subjects

Concepts

Part A: Grades 2-6

Part B: Grades PreK-2

Science, Social Studies, Math

 Altering the environment affects all life forms—includ-

ing humans—and the interrelationships that link them.

Pollutants from human and

natural systems can enter

ecosystems in various ways.

Loovestems possess measur-

The application of scientific

knowledge and technologi-

ment. (3.5)

cal systems can have positive in negative effects on the

mparing and

ted Instruction

Inquistic

Organizing Jolving Problems

able indicators of environ-

mental health. (3.4)

# 5 Types of Pollution

Land Pollution

Water Pollution

**Air Pollution** 

**Noise Pollution** 

**Light Pollution** 

#### Pollution Search

Here's a way for your students to take a closer look at pollution: what it is, what it sources are, and what people can do to reduce it.

#### OBJECTIVES

 Students will identify forms of pollution and describe the effects that various pollutants can have on people, wildlife, and plants.
Students will describe relationships between various forms of pollution and human actions.

#### BACKGROUND

Brown haze wraps around a city. Unwanted tires, appliances, and other refuse float in a stream. Oil washes up on a beach. All of these are examples of **pollution**. Human-generated chemicals, trash, noise, and heat can all be pollutants, but so can ash spewing from an erupting volcano or smoke spreading from a forest fire. Pollution is any contamination of air, water, or land that affects the balance of the environment. Here's an overview of three types of pollution—air, land, and water—and a look at pollution controls.

Air Pollution—Automobiles, incinerators, coal-fired power plants, and factoies release carbon dioxide, suffur oxides, ticulates, and other pollutants into 'r, Fireplaces and wood-burning ydd

Air pollutants can cause health problems for people and other living things. Smog can make people's eyes burn and damage their lungs. Acid rain, caused primarily from the combination of water, oxygen, and atmospheric sulfur dioxide or nitrogen oxides, has poisoned lakes in certain regions, either killing fish or causing chronic stress that makes fish less able to compete for food and habitat. Chlorofluorocarbons (CFCs) in the stratosphere destroy the ozone layer, allowing more of the sun's harmful ultraviolet rays to reach Earth, possibly leading to increased rates of skin cancer. Increased amounts of carbon dioxide and other areenhouse gases in the atmosphere may affect world climate.

Activity 36

ASSESSMENT OPPORTUNITY

# Pass out copies of the student page. Have each

student circle items in the picture that are potential sources of pollution. On the back of the

page they should explain how each item they cir-

cled might cause pollution and what can be done to prevent this form of pollution. See

answers on the last page of this activity.

Since the Clean Air Act of 1970, great strides have been made to reduce air emissions. In 1975, Los Angeles recorded 18 days in which it had a stage 1 Smog Alert. In 1996, the mumber had



# **Example #1: Pollution Search**



#### STEM: Pollution Search Activity

#### Ag Town

- Create a survey sheet to find items at the Fair, return it for a coupon to a sponsored item.
- Incorporate messages and videos from the five types of pollution link on television located in central area.



# Example #2: Getting in Touch with Trees

# Connecting Kids to Nature

Nature is a great teacher and getting kids outside to learn and play is good for their brains and their bodies. Try this outdoor activity from Project Learning Tree<sup>®</sup> - it's safe, fun, and educational!

#### Getting in Touch with Trees

By way of neighborhood trees and a mystery box, children will explore their sense of touch and discover different shapes and textures in nature.

Before venturing outdoors with children, take a walk yourself and find an area where a few different tree species grow. Collect one or more objects from the ground underneath the trees. Place the objects in a "mystery box" so they can be felt but not seen. Take the children to your collection spot, have them feel the items in the mystery box, and challenge them to search the collection area to find the matching objects. Ask:

- · What is important about your sense of touch? How do you use it?
- · What would life be like without your sense of touch?
- · Can you identify objects by only feeling them?

You can also bring along a blindfold and have children examine trees using only their hands. Can similarities and differences be found?

To learn more about the unique characteristics of a few American trees, check out *Trees, Leaves, and Bark* by Diane Burns, 1998, ISBN: 1559716282.

Complete this word search puzzle to discover ten words that describe texture. Look below for the answers.



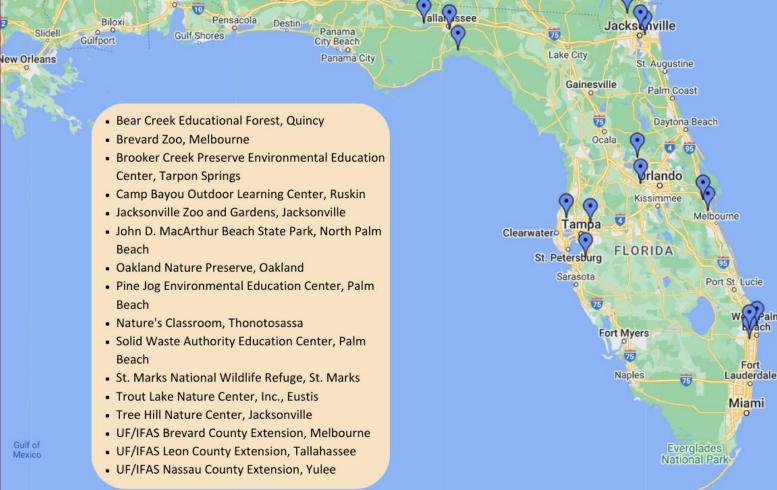
# Example #2: Getting in Touch with Trees

### Get In Touch With Trees Activity

- "Mystery Box" at table for children to feel the items collected.
- Challenge them to search the festival area to find matching objects.



# **PLT Environmental Education Centers**





Mexico

NODI

## **Partners and Resources**

### **Finding Partners and Resources**

Find a Florida Forest Service County Forester:

 https://www.fdacs.gov/Forest-Wildfire/Our-Forests/Florida-Forest-Service-Office-Locations/County-Foresters/Find-a-County-Forester

#### **Find Resources**



https://www.plt.org/



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1

Want to learn more about PLT in Florida?

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https://programs.ifas.ufl.edu/plt/



# Thank You!

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For more information about the Florida Recreation and Park Association visit frpa.org