



# WHAT IS



A project developed and designed by  
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# What Is Forestry?



Cover artwork: Sharon Sloas Boggs

# What Is Forestry?

Forestry starts with trees—knowing how they grow and what part they play in the world as a whole. It helps to know the history of the forest, what kinds of animals live there, and what makes Kentucky's forests special.

Forests affect how we live and provide many things we use, so it is important to take care of them, understand what they give us, and use them wisely. It is also important to know about jobs for people who want to work with trees, timber, or lumber.

We need to understand the effect of today's world on the forests of the future, and we need to think about what kind of forests we would like our grandchildren to enjoy.

Students at Isonville Elementary, Lakeside Elementary, and Sandy Hook Elementary in Elliott County, Kentucky, have provided the artwork and ideas in this booklet to help educate others about our forests and forest resource issues.

These words and pictures show how much a group of young people can come to appreciate Kentucky's forests. We hope they will help you care about our forests, too.



## The History of the Forest

*Katie Ison's fourth grade class, Sandy Hook Elementary*

*"I remember when an ice storm came through our area and broke down most of the trees!"*

The forest has been changed by many things: weather, insects, disease, and people.

When Daniel Boone came to Kentucky, much of the land was covered with large trees, and native peoples were the caretakers of the forest. Later some trees were cut, and land was cleared by settlers for homes and farms. In the late 1800s to early 1900s, the forests changed because of widespread logging. The trees Daniel Boone saw when he came to the state were cut.

When trees are cut from the forest, it leaves room for new trees to grow. This is what has happened in Kentucky, and if Daniel Boone returned today, he would see lots of trees but a different forest.



## How the Forest Grows

*Laura Sparks' fourth grade class, Lakeside Elementary*

*“Seeds can travel many different ways. You can even carry one in your shoe.”*

Trees need air, water, sunshine, and minerals.

There are many different parts of the tree. The roots hold the tree in the ground and give the tree water and minerals. The bark protects the tree like skin protects humans. The leaves make food for the tree. The stem and branches hold up the leaves.

The forest has layers. The top is called the canopy and is made of larger trees. The middle is called the understory and is made of smaller trees. The bottom is called the forest floor, or ground.



## Life in Kentucky's Forests

*Linda Stafford's fifth grade class, Lakeside Elementary*

*“Animals are not the only thing alive in the forest. There are also plants, like poison ivy.”*

There are more than 300 kinds of wildlife living in Kentucky's forests. The forest provides habitat for wildlife, so taking care of the forest takes care of where the animals live.

There are around 200 different kinds of trees and shrubs in Kentucky, and about 50 of these can bring in income.



## The Importance of the Forest to Our Environment

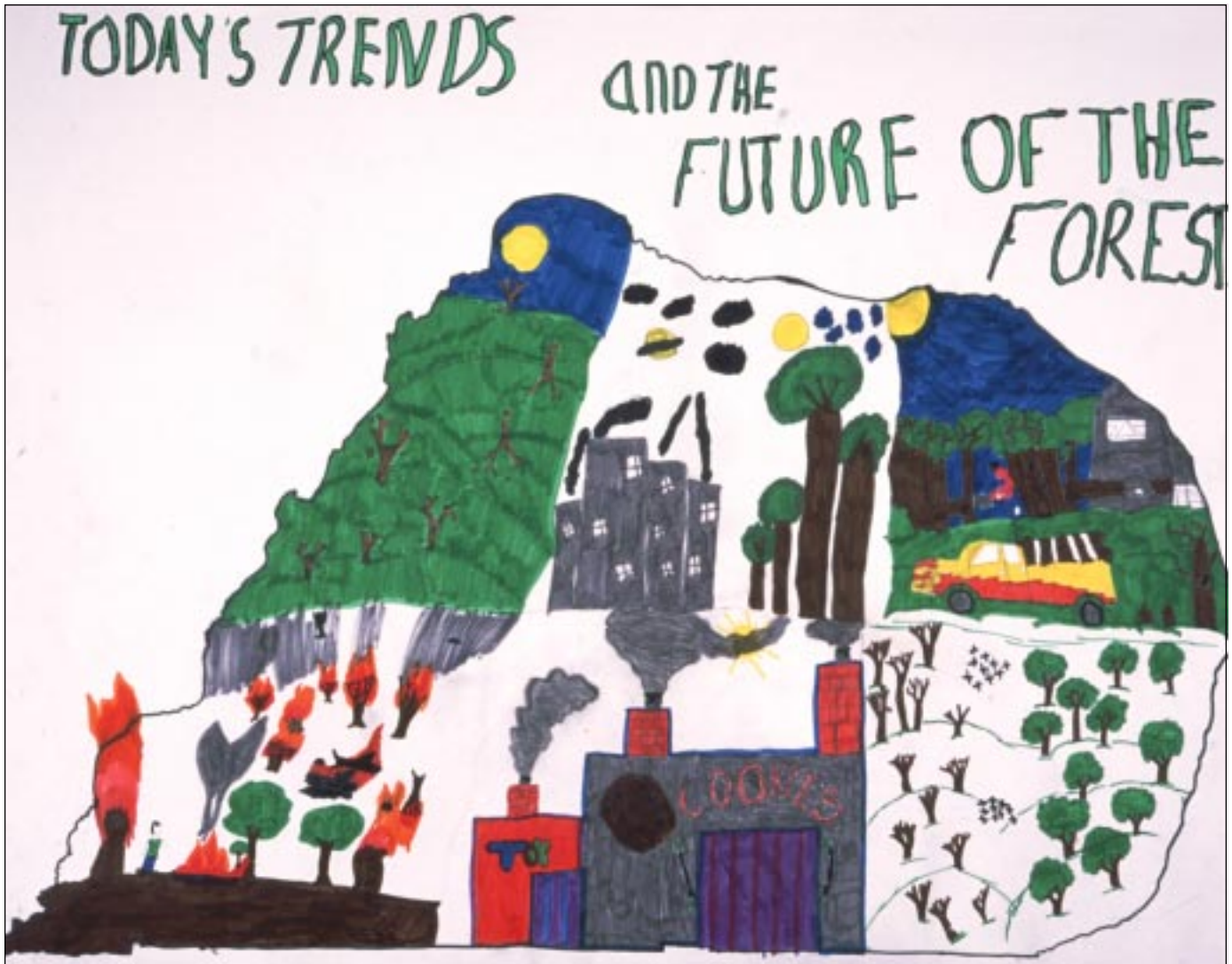
*Darrelline Lewis' fourth grade class, Sandy Hook Elementary*

*"The forest is like our community, always changing."*

Trees hold the soil in place and keep it from washing into the creeks. Forests provide a special place for many animals and small plants.

The forest is like a puzzle; everything is connected: the animals, plants, soil, water, and trees. They all depend each other.

Everything is tied to everything else like a spider web. When you move one piece, it affects other parts.



## Today's Trends and the Future of the Forest

Betty Williams' sixth grade class, Sandy Hook Elementary

*"It is up to us to make a decision now as to what our future forests will be."*

Fire can take waste out of the forest, but uncontrolled fires can be bad and cause a loss of future income from your forest.

If you keep taking the best trees out of the forest and leave the bad trees, the forest's value is decreased, which is called high grading. Damaged trees become more open to insects and disease.

You need to balance or care for what you take from the forest so the future forest increases in quality.

As cities grow in what is called sprawl, land is cleared that results in a loss of forest and agricultural land and a loss of habitat, or places for animals to live.





## How the Forest Affects Our Community

*Linda Stafford's fifth grade class, Lakeside Elementary*

*“If we take care of the forest, it can provide a lot of what we need to live: a place to work, a place to live, a place to play.”*

The forest provides homes, food, jobs, and a place to play, and it cleans water. A forest provides a place for recreation: hunting, fishing, hiking, and camping.

The trees are pretty in the spring and fall and that makes people want to come and see the forest.

Lots of people make a living from the forest: loggers, truck drivers, and people in many other careers.

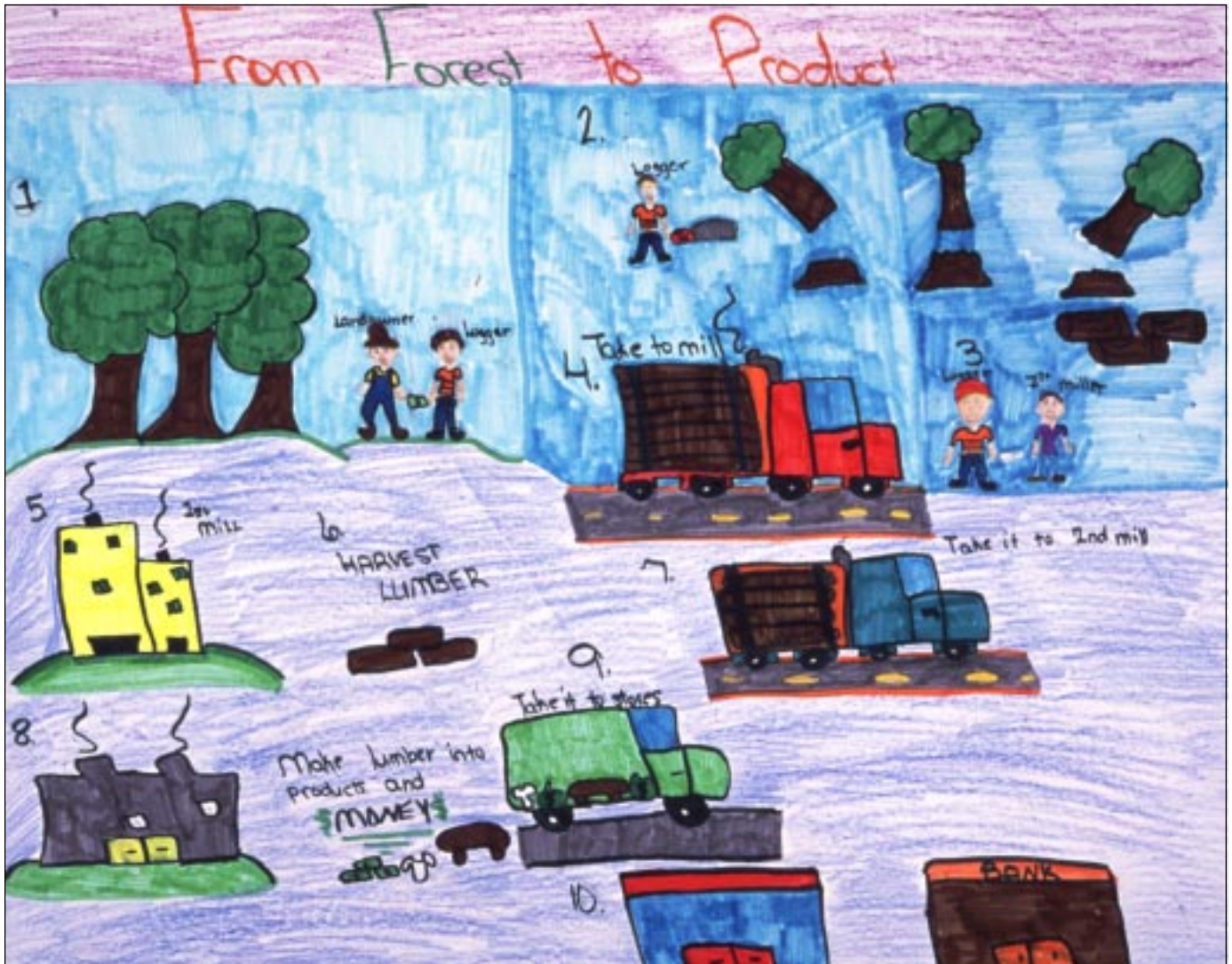


## Forest Products

Denise Boggs' fourth grade class, Isonville Elementary

*"I had no idea there are so many things that come from trees."*

Over 5,000 products come from the forest: lumber, makeup, toothpaste, paper, pencils, maple syrup, oxygen, medicines, furniture, and many more. The forests are a renewable resource. Managing our forests well will allow us to have a continuous supply of forest products.



## From Forest to Product—What Is the Process?

Toni Johnson's sixth grade class, Lakeside Elementary

*“I did not realize the number of jobs in the forest industry.”*

It takes more than one step to produce a product:

1. The logger or mill owner buys trees from the landowner.
2. The trees are cut or harvested and then gathered at the log landing.
3. At the log landing the trees are loaded on a truck and driven to a mill.
4. At the mill, the logs are separated, sawn into lumber, and dried.
5. The lumber is loaded onto trucks and shipped to stores.
6. People or companies buy the lumber and build products such as furniture or flooring.



## Careers the Forest Holds for Us

*Sharon Boggs' sixth grade class, Isonville Elementary*

*“To get a job in forestry, you should do well in school. Some jobs in forestry require you to go to college or technical school.”*

- Wildlife biologists study wildlife.
- Foresters make forest management (care) plans.
- Consulting foresters help people selling timber.
- Naturalists teach about the environment.
- Loggers harvest the trees.
- Equipment operators run bulldozers, skidders, booms, or trucks.
- Mechanics fix forestry equipment.
- Forest engineers plan logging operations.
- Artisans obtain materials from the forest to create art.
- Lumber mill owners/operators saw logs into boards.
- Carpenters make wood into furniture.
- Machinists make furniture and other forest products.
- Forest scientists study the forest.
- Botanists study plants.



## What Do We Want the Forest to Look Like in 100 Years?

*Shana Reed's fourth/fifth grade class, Lakeside Elementary*

*“We would like a forest with no trash, healthy trees, homes for animals, and a natural and peaceful setting with clean rivers.”*

If you could look out your window at a forest in 100 years, what would you want to see?

It could be a healthy forest, lots of wild flowers, different kinds of wildlife, an investment for your grandchildren that could send them to college, the trees you climbed when you were a child, and a creek with clean water.



## Caring for Our Forests

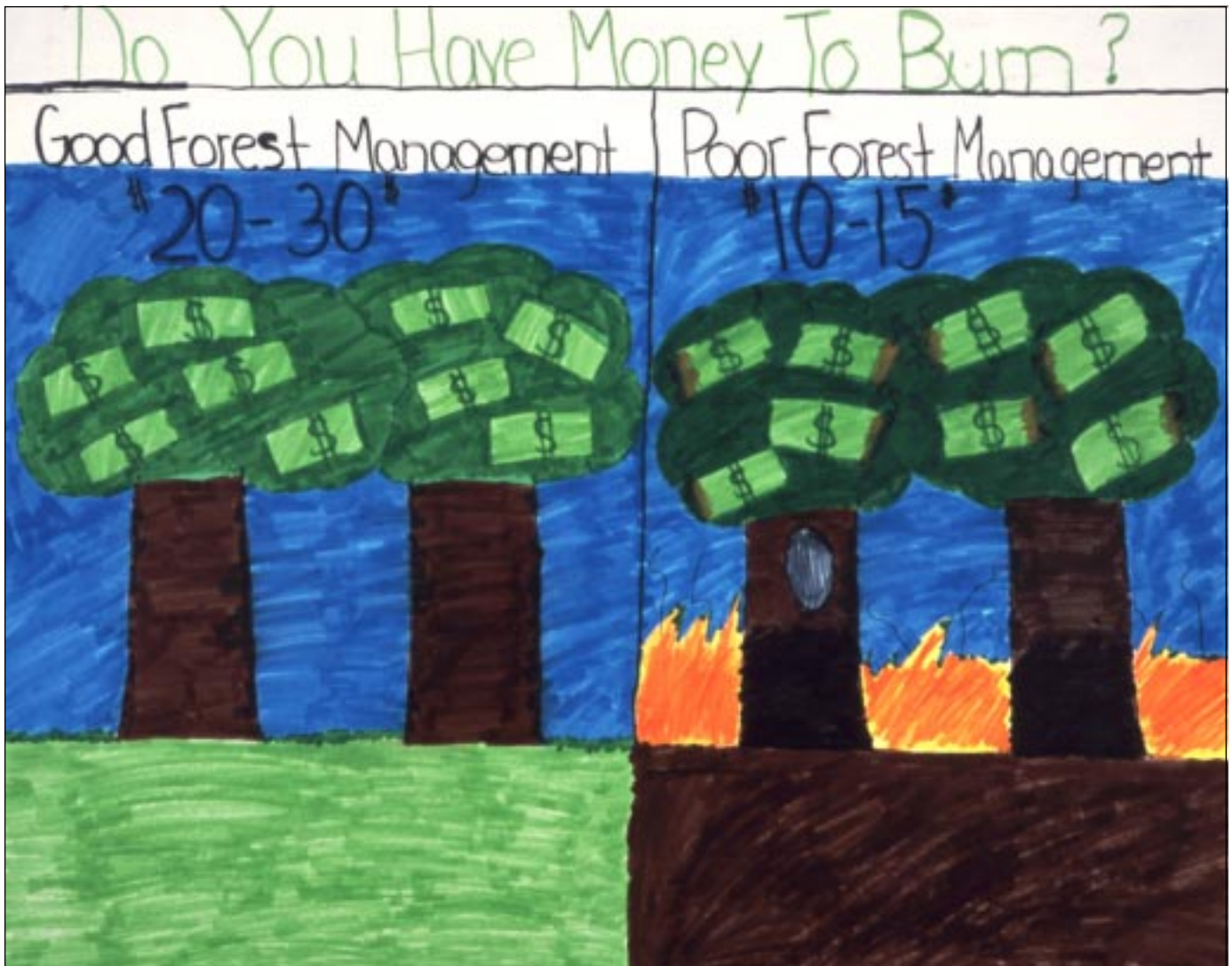
*Robin Griffith's fifth grade class, Sandy Hook Elementary*

*“If you care for the forest, it will give you more of what you want and need.”*

We can take care of our forests for many different reasons, including providing timber, recreation, water, and a home for wildlife.

To decide how we want to take care of our forests, we need to think about how we want our forests to look in future. Do we want income from the forests, hiking trails, wildlife, or something else? With a good forest plan we can have many choices.

Caring for our forests is like raising our children; the attention we give them will determine their outcome.



## Caring for Our Trees Pays

*Brenda Bradford's sixth grade class, Lakeside Elementary*

*"I realized how important it is to take care of your trees so they will be worth more money in the future."*

It is important to take care of our trees so they will be worth more in the future.

Preventing fires from getting out of control and not using living trees for fence posts will make our trees more valuable. While not all fire is bad, fires that are uncontrolled or "torched" do damage and cost money. Although fire can kill trees, more often fire just causes damage and allows insects and disease to attack. In future years the damaged trees may look sound, but the heartwood or core of the trees may be rotten, which takes away from the quality of the wood and its value.



## Forest Harvesting

*Freida Tussey's fifth grade class, Isonville Elementary*

*“Cutting trees is not bad, but it needs to be well planned.”*

There are many ways to harvest trees:

- Group selection is taking a group of trees from only one area. It can prevent the spread of insects or disease and can help keep the forest healthy.
- Single tree selection is taking selected single trees from throughout the forest. It provides trees for certain products like white ash for baseball bats.
- Clear-cutting removes all the trees in an area and lets in more sun for new trees to grow.
- Thinning removes some trees to allow other trees to grow better.
- Seed tree cutting leaves a few well-spaced trees for re-seeding the area.

Trees can grow back or re-sprout from the stump and roots of cut trees.





## What to Know Before Selling Timber

Vicky Riffe's sixth grade class, Sandy Hook Elementary

*“Before I sell my timber, I want to have written on paper what’s going to happen.”*

Here are steps to follow before selling timber:

1. Decide if you want to sell the whole “boundary” or just part of the timber on your farm.
2. Decide how you want to sell your timber: Ask a forester to help you make a decision (for help finding a forester, go to page 17).
3. Request a reference to find out how well the logger did on other jobs.
4. Advertise widely. If you only get one offer, how can you know if it is a high offer or a low offer?
5. Sell by written contract to protect both you and the logger.
6. Oversee the sale. Make sure the contract is followed.



## Resources for Forest Information

*Jady Skaggs' fifth grade class, Sandy Hook Elementary*

*“All the information is available for you; all you have to do is ask.”*

- **Kentucky Division of Forestry:** Call (800) 866-0555 or (502) 564-4496 to find out the phone number of your county forester, who can make up a free forest management plan for you.
- **Cooperative Extension Service:** Find it in the phone book under the name of your county. An Extension agent can provide you with a list of loggers and consulting foresters.
- **Natural Resources and Conservation Service:** Call (859) 224-7350 for conservation plans for water and soil quality and information about the Forestry Incentive Program (FIP), which will pay part of the cost of replanting trees if you have a forest management plan.
- **Consulting foresters:** Contact your county Cooperative Extension Service office for a list of consulting foresters, who charge a small fee but usually help get a better price for timber.

# About This Project

We wanted to celebrate one of our best assets in Kentucky, our youth, by using their help to create a publication for all ages to explain forest resource issues.

Students at Isonville, Lakeside, and Sandy Hook elementary schools in Elliott County, Kentucky, took part in a 4-H project using interactive educational activities about 15 different topics in forestry.

The youth were asked to tell us, in words and drawings, what they learned for each of the 15 different topics.

This project was developed and designed by Dr. Marcella Szymanski, Assistant Extension Specialist in Forest Economics and Natural Resources; Gwenda Adkins, Family and Consumer Science Agent, Elliott County; and William Thomas, Agriculture and Natural Resource Agent, Elliott County. Educational activities were provided by Project Learning Tree and Project Wild. Information was provided by the Kentucky Division of Forestry and Daniel Boone National Forest. Some information was specifically designed for this project by the University of Kentucky Cooperative Extension Service.

We would like to thank students and teachers at Isonville, Lakeside, and Sandy Hook elementary schools for their hard work on the project. We thank Debbie Murray, Extension Program Director of the Northeast Area for her support. For their help in reviewing this publication we thank Dr. Jeff Stringer, Assistant Extension Specialist in Hardwood Silviculture; Doug McLaren, Forestry Extension Associate; and Laurie Taylor, Natural Resource Educator. We also thank UK Agricultural Communications Services for its assistance and the Kentucky Division of Forestry for help with educational activities.

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# Participating Schools

## Isonville Elementary School

### Fourth Grade

Teacher: Denise Boggs

Scott Orban Barker  
Michael S. Eldridge  
Jonathan P. Ferguson  
Tiffany Dawn Fields  
Jessica N. Gilliam  
Lucas D. Gilliam  
Carmen D. Hall  
Michael J. Hay  
Shelia M. Laney  
Elizabeth S. Lovato  
Kimberly McDowell  
Nathan Von McDowell  
Ronnie C. Oney  
Aaron Michael Peters  
Tyler R. Riggsby  
Heather Lynn Skaggs

Silena Skaggs  
Meggan Renee Sloas  
Kayla N. Stephens  
Elizabeth C. Thomas  
Nicole Renee Wagoner  
Brandle A. Wells  
Amanda F. Whitley

### Fifth Grade

Teacher: Freda Tussey

Lori A. Adkins  
Brittany J. Barker  
Kelley Marie Barker  
Samantha A. Cox  
Amanda Eldridge  
Gregory N. Gilliam  
Christopher A. Hall  
Jonathan J. Hall

Ashley Keaton  
Billy Maxie  
Bonnie M. Maxie  
Hazel Maxie  
Timothy R. Maxie  
Rodney D. Messina  
Tiffany R. Mullett  
Cory E. Opp  
Garrick Pennington  
Jessica R. Salyers  
Sarah J. Salyers  
James Z. Skaggs  
Adrianna Sturgill  
Nathan L. Sturgill  
Donald C. Vaughn  
Amy M. Wagoner  
Joanna L. Wagoner  
Kimberly W. Wagoner  
Rachel C. Wagoner

### Sixth Grade

Teacher: Sharon Sloas Boggs

April N. Blankenship  
William J. Conley  
Kayla R. Evans  
Lacy D. Lewis  
Nathan S. Lewis  
Anastasia N. Lovato  
Travis L. Matthews  
Margaret C. Maxie  
Willis A. Maxie  
Sarah E. Porter  
Rebecca Sue Rupe  
David Skaggs  
Keshia D. Skaggs  
Johnny G. Stevens  
Justin R. Wagoner  
Windy R. Wagoner  
Rebecka J. Whitley

## Lakeside Elementary School

### Fourth Grade

Teachers: Laura Sparks &  
Shana Reed

Marissa C. Adkins  
Seth Alan Adkins  
Mikeal Joe Barker  
Megan Danielle Boggs  
Joseph Adam Conley  
Willard Justin Conn  
Christopher E. Dickerson  
David Leston Dyka  
Cheisi A. Elliott  
Samatha J. Griffith  
Corey Hall  
Bradley S. Hickman  
Crystal L. Holbrook  
Kera Ann Howard  
Tella Marie Johnson  
Joshua C. Leadingham  
Zachary James Lewis  
Tabathia L. Mason  
Stacy D. Middleton  
Britanni A. Parmley  
Beverly N. Porter  
Lauren R. Porter  
Aaron Brent Randolph  
Whitney N. Salyers

Alyssa Ann Skaggs  
Danielle L. Skaggs  
Lashawn Angel Skaggs  
Damen Lee Smith  
Braydan S. Tucker

### Fifth Grade

Teachers: Linda Stafford &  
Shana Reed

Corey T. Bames  
Danny Martin Bayless  
Leevon Bear  
Matthew T. Blevins  
Tasha R. Carrington  
Joseph Aaron Carter  
Morgan E. Carver  
Ashley D. Cox  
Jonathan Ray Cox  
Shaun Riley Cox  
Nathan W. Davis  
Jared T. Dickerson  
Adam J. Eldridge  
Tommy Lee Garriss  
Joshua Ray Greene  
Hallie Sue Griffith  
Kelsay D. Harper  
Lela N. Hickman

Joshua S. Hill  
Melissa Leann Holbrook  
Sarah R. Ison  
Sarah Johnson  
Derrick Laney  
Christoph Leadington  
Hayley Nicole Lewis  
Natasha N. Lewis  
Justin L. Lyons  
Vickie Lee Nicholson  
Emily Grace Porter  
Jacob D. Randolph  
Keisha R. Randolph  
Brittany N. Rose  
Timothy E. Stephens  
Danielle Turner  
Latysha D. Walker

### Sixth Grade

Teachers: Brenda Bradford &  
Toni Johnson

Lisa Boggs  
Vanessa Sue Brown  
Reba Katherine Click  
Gregory L. Conn  
Michael Paul Cox  
Amelia Eldridge

David Chase Evans  
Michael Scott Fannin  
Nancy K. Greene  
Thelma N. Griffith  
Troy J. Griffith  
Hilary D. Holbrook  
Leah E. Horton  
Adam L. Howard  
Alesha Howard  
Joshua Lewis  
Kayla Lewis  
Chelsa C. Markwell  
Andrew Alderick McLaughlin  
Nathan A. Moore  
Stephanie D. Porter  
Derek D. Randolph  
Jackie Reynolds  
Christopher R. Skaggs  
Jessica F. Smith  
Nathan Stephens  
Heather M. Stevens  
Derek Whisman  
Amber Nicole Wood

# Sandy Hook Elementary School

## **Fourth Grade**

*Teacher: Darrelene Lewis*

Theressia M. Adkins  
Heaven Clevenger  
Matthew A. Elliott  
Caitlin Rose Fannin  
Ethan Grant Faulkner  
Evan Blake Faulkner  
Garrett Walter Fultz  
Jenna M. Gilliam  
Jacqueline H. Harmon  
Bobby Ray Howard  
Treyleigh Nichole Lewis  
Michael David Marx  
Brandy Moore  
Jonathan Moore  
Donovan Wade Perry  
Chrystal Riggsby  
Banasha Elaine Rowe  
Dustin Brian Eugene Russell  
Johnny Edward Skaggs Jr.  
Kevin Lee Stamper  
Megan A. Tolliver  
Talisa Danielle Wagoner

## **Fourth Grade**

*Teacher: Katie C. Ison*

Lacy Morgan Blevins  
Leah Kathryn Blevins  
Bethany Bowling  
Kaleb Carpenter  
Keith Anthony Center  
Billy Click  
Whitney Nicole Cline

Bronson J. Flatt  
Krista Lynn Fultz  
David Ray Gillum  
Benjamin Terry Green  
Stephanie Juniper  
Charles A. Kibbey  
Mary Ann Noble  
Wayne T. Reynolds  
Joseph M. Stapleton  
Ricky K. Stevens  
Kaneatha Thornsberry  
John William Walter  
Kala Noel Wilson  
Sheena Rene Wilson

## **Fifth Grade**

*Teacher: Robin L. Griffith*

Samantha K. Brickey  
Jeremy C. Clinger  
Heather Eagle  
Justin Tyler Fannin  
Billy Malcolm Fultz  
Cassie M. Gray  
Bryan Lee Holland  
Korey Scott Ingram  
Samantha Faye Ison  
Andrew Zachary Le  
Amber Nicole Mofford  
James Talbit Nickell  
Paul O'Neal Jr.  
Nathan Adam Perry  
Lucas Lee Stegall  
Brittany D. Stephens  
Maynard A. Stevens  
James Michael Trimble

Laken Hope Wilder  
Mary A. Williamson  
Danielle Wolfenbarger

## **Fifth Grade**

*Teacher: Jady R. Skaggs*

Angel Renee Brown  
Jeremiah Joseph Butts  
Kaleigh Carter  
Rachel Marie Castle  
Melissa G. Clevenger  
Caitlin Coffey  
Brian K. Eldridge  
Bethann M. Englehardt  
Jeffery S. Flannery  
Monica Lee Fraley  
Samantha L. Gilliam  
Teara Noel Jessie  
Travis Colby Jones  
Brittany Renee Layne  
Sabra L. Lewis  
Joshua Allen Mason

## **Sixth Grade**

*Teacher: Betty S. Williams*

James K. Adkins  
Ashly N. Boggs  
Carol Layne Burton  
Frances Collette Burton  
Pamela Jean Cline  
Jeramie Elliott  
Brittany Ferguson  
Jessica E. Gilliam  
Adam L. Howard

Ricky N. Juniper  
Amber N. Kinster  
William Anthon Mason  
Issac S. Smith  
Shelly Rena Smith  
Robert Brian Spears  
Whitney A. Thompson  
Trista June Wagoner  
Charles A. Weddington  
Charles Daniel Weddington  
Jordan Wilder

## **Sixth Grade**

*Teacher: Vicky Riffe*

Joann M. Brangard  
Cody A. Carpenter  
Amelia G. Conway  
Kendra E. Dickerson  
Jaclyn B. Ferguson  
Erica D. Gibson  
Cameron A. Griffith  
Justin Lee Kidd  
Dustin E. Line  
Aaron D. Moore  
Lisa M. Short  
Joshua Allen Sims  
Joshua Joe Smith  
Brenna Ann Telaroli  
Justin D. Watson  
Ronald E. Weddington  
Randi E. White  
Aleisha N. Whitt