

## Time Frame

4 Class periods +  
Library Research +  
Class Presentations

**THIS IS A DRAFT COPY  
ONLY**

## Key Words

Private Forest  
Watersheds  
Segmenting land  
Shelterbelts  
Tree Farming  
Endangered Species Act  
Clean Water Act

## Teacher Pages

Overview .....  
Objectives .....  
Lesson Plan .....  
Class Extensions .....  
Team Teaching.....  
Links .....  
References .....  
Wk 1 & 2 Directions....  
Project 1 Directions....  
Wksht 3 Directions.....  
Application .....  
Test .....  
Reflection .....  
Answer Key .....

## Student Pages

Essay .....  
Worksheet 1.....  
Tree Farm Story.....  
Project 1 Directions...  
Project 1 Checklist.....  
Worksheet 2.....  
Wksht 2, Checklist.....  
Private Forestlands  
& the Rights of  
Landowners.....

## OVERVIEW

**Private Forests and Their Values** has students study the history of private forests and the values these lands have to the United States. Students will also examine tree farming in America, and take a closer look at the challenges facing private forestland owners.



March 20, 2005: Maple Syrup Days, part of a tree farm tour by Western Illinois Tree Farm Regional Committee. Jack Wohlstadter's Tree Farm (Provided by: the photo gallery at the Illinois Tree Farm System website).

## OBJECTIVES

### National Council for History

The students will conduct historical research; obtaining historical data.  
(Historical Thinking, Standard: 4B)

### National Standards for Social Studies

## LESSON PLAN

**Teacher Preparation** - Download and print Module 10 using Adobe Acrobat.

**Day 1 activity:** Make copies of the Essay for each student in your classroom. Next make copies of Worksheet 1.

**Day 2 activity:** Make copies of "Tree Farms in the U.S.," Interview - Student Directions, and Interview-Student Checklist for each student. Read the Teacher Directions and be sure to read the "things to consider" section. (You may want to make a list of the local tree farmer(s) or private forestland owner(s) and their contact information to give to the students.)

**Day 3 activity:** Make copies of "Private Forestlands and the Rights of the Landowners," Worksheet 3, and the Checklist for each student.

### Day 1

Set the stage for this activity by leading a short group discussion answering the following questions:

- What do you know about private forest land?
- What are private forests?
- What are the uses of private forests?
- Why do people own private forests?
- How many people do you think own private forests?
- Are most forested lands in the U.S. owned by the government or by individuals?

Now read the essay, "The Value of Private Forests" together as a class (silently at desk or out loud). Then complete Worksheet 1, Family Owned Forest Facts.

### Day 2

**Read:** "Tree Farms in the U.S."    **Assign:** Project 1 "Interview a Tree Farmer"

### Day 3

**Read:** "Private Forestlands and the Rights of the Landowners"

**Assign:** Investigative Report

### Day 4

Choose from one of three types of activity assessments.

- Application and Integration Exercise (Page)
- Test (Page)
- Reflective Exercise (Page)

Use the Answer Key to check answers (**Pages**)

## CLASS EXTENSIONS

- Arrange a field trip to visit a local private forest or tree farm and meet with a local forestland owner to view their land, participate in hands-on activities, or view current forest research, etc.
- Invite a State and Private Forester into your classroom to discuss their job in relationship to private forestland owners, the help they offer local forestland owners, and the types of management plans they might suggest to local forestland owners.
- Have students submit their interview article (Project 1) to a local Tree Farm System to see if they can be published in the next newsletter.

## Team Teaching Possibilities

**Technology:** Students could conduct Internet research in their technology class. Students could also create a graph (using Excel) using the information in the charts from Worksheet 1.

**English:** Students could write a biography of a private forest land owner or the land owner's family.

**Math:** Complete Worksheet 1 in Math class.

**Science:** Have students learn more about watersheds in their community and research the ecological benefits of private forests in their area.

Or have students conduct a watershed activity, "Down by the River" provided by the Missouri Department of Natural Resources – <http://www.watersheds.org/teacher/water02.htm>

## LINKS

**Forest History Society**--Bibliographic resources on private forests and environmental history <http://www.foresthistory.org/Research/Biblio.html>. Ordering Resource for: *American Forests: A History of Resiliency & Recovery*, *The Greatest Good* film <http://www.foresthistory.org/Publications/>.

**The Natural Inquirer**, "Before & After: A Look at Our Land" (Activity about land use history in Jones County, GA.) [http://www.naturalinquirer.usda.gov/pdf/6\\_28.pdf](http://www.naturalinquirer.usda.gov/pdf/6_28.pdf)

**HistoryLink.org**, The Online Encyclopedia of Washington State History. This site offers a variety of Forest History Activities. Activity 8 is on debating land use: [http://historylink.org/wfpa/13-activity8-what\\_picture\\_do\\_you\\_like.pdf](http://historylink.org/wfpa/13-activity8-what_picture_do_you_like.pdf)

**State and Private Forestry, USDA Forest Service** - <http://www.fs.fed.us/spf/>

**Dictionary.com**, general reference site, giving students information about word meanings, pronunciations, etc. - <http://dictionary.reference.com/>

**American Tree Farming System**- State programs: <http://www.treefarmssystem.org/cms/pages/35.html>

**American Forests** has developed a process called Regional Ecosystem Analysis (REA), which uses a combination of data to measure a region/city's tree canopy and calculate the value of the services trees provide in terms of the work they do to clean the air & water in that community. (many areas available). <http://www.americanforests.org/campaigns/ecological%5Fservices/>

**Society of American Foresters** - is the national scientific & educational organization representing the forestry profession in the United States. <http://www.safnet.org>

**The National Christmas Tree Association:** has a science curriculum online <http://www.realtrees4kids.org/>, as well as a feature where you can put in your zip code and find a nearby Christmas tree farm <http://www.christmastree.org/home.cfm>.

## REFERENCES (NOT COMPLETE)

MacCleery, Doug. *American Forests: A History of Resiliency and Recovery*. Durham, NC: Forest History Society, 2002.

Forest Learn. Oregon Department of Forestry, <http://www.forestlearn.org/forests/ofpa.htm> (October 2006).

American Tree Farm System. [http://www.treefarmssystem.org/cms/pages/69\\_1.html](http://www.treefarmssystem.org/cms/pages/69_1.html) (September 2006).

## Tree Farm Interview (Teacher Directions)

- Have students read “Tree Farms in the U.S.”
- Assign: Interview a Tree Farmer or Private Forestland Owner
- Pass out Interview Student Directions and Interview: Student Checklist, and go over the assignment with students

### Things you may want to consider or do before assigning this project:

- FYI: this project may take 2-3 weeks to complete (need to allow time to set up and complete interviews, allow extra time if students have to locate a tree farmer on their own).
- You may want this project to be a group assignment.
- You may want to have a list of a few local tree farmers or private forestland owners and their contact information to give to the students (this would shorten the amount of time necessary for this project).

#### **Where to find this information?**

Most state tree farm programs are arranged with district coordinators who oversee the program in a group of counties. Any state tree farm leader could put a teacher in touch with a district coordinator who in turn could line up a meeting with a tree farmer in the county where the school was located. For example, in the state of North Carolina the head of the county Tree Farm System, Al Weller, might send you to the North Carolina Tree Farm Program District Coordinator page at <http://www.nctreefarm.org/id10.html>, and from there you could contact your district coordinator to get in touch with a tree farmer in your county. You can find the contact for your state, the head of the state committee of the American Tree Farming System programs, listed at <http://www.treefarmssystem.org/cms/pages/35.html>. Or you may consider contacting your Local State Forester (at <http://www.stateforesters.org/SFlist.html>), to help find a local tree farmer or private forestland owner in your area. (You may also wish to contact these people, if you have specific questions about tree farming in your state or if you would like them to come into your class and speak as an extension activity.)

- You may want to have each person or group present their essay, documentary, or oral history to the class.
- You may want to consider contacting 2 or 3 local tree farmers or private forestland owners to have them come into your classroom for interviews instead of having the students call these individuals to conduct the interviews.

## Investigative Report (Teacher Directions)

- Have students read “Private Forestlands and the Rights of the Landowners.”
- Assign Investigative Report
- Pass out Investigative Report Student Directions & Student Checklist. Read the student directions together as a class and go over the assignment with students.
- After the students have turned in their reports, have each student give a little three minute synopsis of their findings. Then lead a discussion on the issues facing landowners.
  - What do the students think is the greatest obstacle forestland owners face? And what would the students recommend for overcoming this obstacle?
  - After, completing all of these activities, what do the students think of private forestlands?

### Things you may want to consider or do before assigning this project:

- You may want this project to be a group assignment.
- Give students a list of places to look for this information:
  - Information about some potential topic ideas: <http://conserveonline.org/workspaces/privateforests/forest101/>.
  - Endangered and Threatened Species on your Land? answers eight common questions on the issue of having endangered species on your land. <http://www.dnr.state.wi.us/org/land/er/edc/landowners.htm>
  - Threatened & Endangered Species and the Landowner, this web publication from the Fish & Wildlife Service answers common questions related to threatened & endangered species issues. <http://www.na.fs.fed.us/spfo/pubs/wildlife/endangered/endangered.htm>
  - 2005 Forest Health Highlights, <http://www.fs.fed.us/r6/nr/fid/news.shtml>
  - Website listing of insect/pest notes. [http://www.oregon.gov/ODF/PRIVATE\\_FORESTS/fh.shtml#Forest\\_Insects](http://www.oregon.gov/ODF/PRIVATE_FORESTS/fh.shtml#Forest_Insects)
  - Global Institute of Sustainable Forestry article on forest insects, <http://research.yale.edu/gisf/assets/pdf/ppf/flyer.pdf>

- You may consider contacting your Local State Forester (at <http://www.stateforesters.org/SFlist.html>), to help find a local private forestland owner in your area to interview or to ask questions about issues facing private forestland owners in your area currently.

## ASSESSMENT 1: Application & Integration Exercise (Student Page) – **WORK IN PROGRESS**

## ASSESSMENT 2: TEST (Student Page)

Name: \_\_\_\_\_

1. What benefits to the public do Private Forests offer? (Name at least 4)
  
  
  
  
  
  
  
  
  
  
2. Today, what is the estimated area of land in the U.S. that is covered by forestland?
  - a. 1 billion
  - b. 749 million
  - c. 424 million
  - d. 956 million
  
  
  
  
  
  
  
  
  
  
3. What did the Clarke-McNary Act of 1924 do?
  
  
  
  
  
  
  
  
  
  
4. Explain the Soil Bank Program.

5. What estimated percentage of U.S. forestlands is privately owned?

- a. 20%      b. 45%      c. 60%      d. 90%

6. Name two of the agencies or programs that a private forestland owner might choose to help them manage their land and briefly describe the help offered by the agency or program.

7. What is a tree farm?

8. The American Tree Farm System has a set of standards that any private forestland owner must meet in order for their land to become a Certified Tree Farm. How many standards are there currently? Give at least three examples of these standards.



9. List three interesting facts you learned from your Tree Farmer/Private Forestland Owner Interview.

10. Name a problem facing private forestland owners that you learned about from the Investigative Report findings.

11. What is the most interesting thing you learned from these lessons on Private forestlands?

**ASSESSMENT 3: REFLECTIVE  
EXERCISE** (Student Page) - **WORK IN PROGRESS**

**TEACHER'S ANSWER KEY** - **WORK IN PROGRESS**

(Student Page)

## Essay: The Values of Private Forests

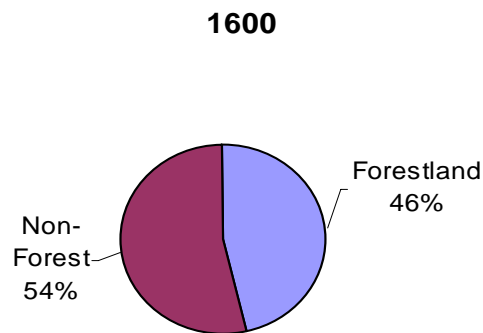
### Introduction

Many people tend to think of forested lands in the United States as National Parks, National Forests, or State Forests. A majority of forested lands are actually privately owned and provide numerous values to our lives. These private lands provide a variety of benefits to the public, such as: pure and plentiful water, clean air, wildlife habitat, recreation opportunities, and a renewable supply of wood and fiber.

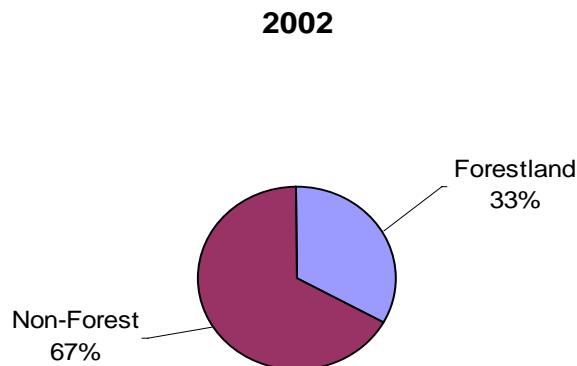
Forestlands covered about 1 billion acres or almost half of the U.S. land area in 1600 (see graph 1a). Today we have about 749 million acres of forestland, or about one third of the U.S (see graph 1b). That means that about 70% of the original forestlands of 1600 remain forestland today. Roughly 350 million acres have been converted to other uses since 1600, primarily for agriculture.

In the 1800s growth in population and the need for agricultural land put increasing pressure on forests in the U.S. The nation's forestland area decreased dramatically. Then in the 1900s with improvements in farm technology and productivity forestland areas started to stabilize, or even out. Today the nation's forestland is about the same size as it was in 1920 due to this stabilization.

**Forest Area as percentage of U.S. Land Area, 1600 - 2002**



**Graph 1a:** Forestland covered 1045 million acres of the nation's land in 1600, while non-forestland covered 1218 million acres.



**Graph 1b:** Forestland covered 749.9 million acres of U.S. land in 2002, while non-forestland accounted for 1514.3 million acres of land.

**Figure 1:** Source - *Forest Resources of the U.S.*, 2002. GTR-NC-241, USDA Forest Service, 2004.

## History of Land Ownership in the U.S.

Several events occurred in the early history of the U.S. that helped shape landownership patterns and property rights. At the time of the Thirteen Colonies, land was given to individuals and families by the British. This land might then be sold or deeded to other individuals. After the colonists won the Revolutionary War and earned their freedom from England, the newly formed U.S. government began to obtain new lands throughout North America. Through the Northwest Ordinance, the Louisiana Purchase, the Florida Purchase, and other such land purchases, the new government gained public lands faster than they could be sold or given away. Consequently the newly formed United States found itself holding more land than it knew what to do with. The government decided early on to allow these lands to be sold to private individuals without restrictions on land use. The hope was that these individuals would use the lands to generate wealth and in turn the entire nation would benefit. Basically the U.S. government wanted to distribute as much of the public lands as possible to private land owners in the shortest period of time.

During the Civil War the Homestead Act of 1862 and the Morrill Act of 1862 were passed. Both were created to get more land into the hands of private land owners. After the Civil War ended in 1865, people began moving westward. **Right-of-way** across public lands was granted by Congress to persons for mining, agriculture, manufacturing or other purposes. Right-of-way was a bundle of rights that included the ability to travel freely, maintain and improve road ways under certain conditions, and otherwise manage land use. The intent was to open the west for expansion. As a result, logging crews began harvesting trees in the South and the northern woods of the Great Lakes states to provide the lumber needed to build new cities.



Figure 2: U.S. western railway land grants. The shaded areas were granted to railroad companies by the U.S. federal government.

Image provided by: Harvard University Graduate School of Design, Frances Loeb Library from their Images of America: Lantern Slide Collection.

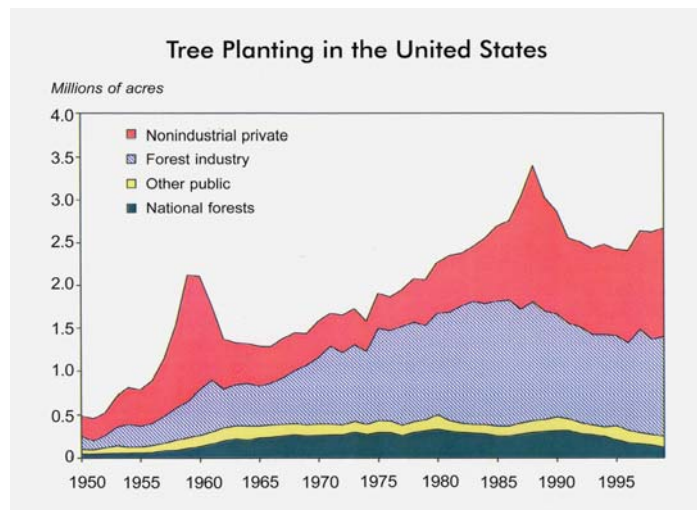
During the early and mid 1800s this policy of giving away land and getting it into private hands continued. In fact, during the nineteenth century, about 75% of the continental United States was sold or granted to homesteaders, war veterans, local governments, and corporations. Between 1850 and 1870, 10% of land in the lower 48 states was set aside by Congress to help finance and operate the transcontinental railroad and telegraph systems which were considered essential for the growth of the young country. Often the land granted to railroads was sold to help the railroad company make money. With this money they built their railroads. The creation

of the rail system helped with the more rapid settlement of the West. In the end, four out of the five transcontinental railroads were built with help of these land grants offered by the federal government.

In the later part of the nineteenth century, many people started to think about conserving natural resources rather than exploiting them. They began to realize that conserving resources was necessary to continue to provide the timber, range, and water needed to maintain growing populations and new communities. Policies of giving away land began to change and the U.S. started to create public forestlands. In 1905 the U.S. Forest Service came into being. Along with this new agency came new forest management ideas and practices. Public programs were designed to educate landowners on planting and nurturing the private forestlands they owned. In the early 1900s various acts were passed to increase funding to manage forestlands and offices (or departments) were set up to help determine forest management practices. By the early 1920's thirty-one states and Hawaii had set up forestry departments. In 1924 the Clarke-McNary Act was the first law passed that offered federal assistance to small forestland owners. Over the years, debate has continued as to whether the government should be allowed to regulate forest management on private lands.

### **Forest Programs of the mid to late 20<sup>th</sup> Century**

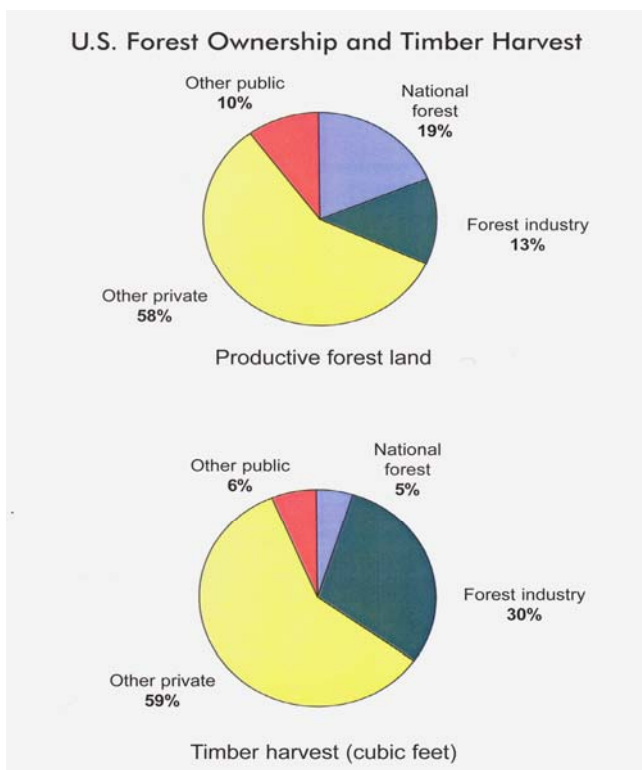
Tree planting in the U.S. exploded after World War II. Accurate estimates for wildland tree plantations in the U.S. are difficult to obtain; however, educated guesses by forestry experts suggest that by 1952, nearly 5 million acres of tree plantations existed. Large areas of farmland were converted to plantations from 1956-1961 under the **Soil Bank Program**. The Soil Bank Program was a federal program designed to transform land regularly used for crop production, to land used for conservation purposes. This program was responsible for planting trees on nearly 2 million acres of mostly over-worked farmland. The Southeastern States became the leader in planting trees with over 11 million acres, followed by the Pacific Northwest (4 plus million acres) and the South Atlantic States (4 million acres). From 1975-1997 large areas of low-quality timberland and farmland were converted to tree plantations due to the Forest Incentives Program and later the **Conservation Reserve Program**. These are federal programs that offered assistance to farmers and ranchers to address soil, water, and other natural resource concerns. Over 50 million acres of pine and hardwood trees were planted during this 22-year period.



**Figure 3:** Tree planting in the U.S. increased following World War II, peaking in 1988. In the 1990s more than 25 million acres were planted. In recent years, tree planting has averaged between 2.4 million and 2.6 million acres annually. The peaks in the planting in the later 1950s and 1980s correspond to the efforts of the Soil Bank Program and the Conservation Reserve Program and point to the effects that government subsidies can have on acres planted. Source: Douglas MacCleery. *American Forests*. Forest History Society, 2002.

## Private Forest Uses:

Growing populations and global economies are creating increased demands for forest products (lumber, paper, etc) and therefore placing pressure on the world's forests. Much of that pressure has been and continues to be on private forests. It is a challenge to meet the demands for forest products while keeping the forests healthy. For example, there are about 749 million acres of forest in the United States, almost 71% of that (or 530 million acres) is owned by private landowners or industries. These private lands provide the majority of the country's forest products and services. It is estimated that 89% of the timber harvested in the United States comes from private lands. Of this 89%, about 30% of our nation's timber harvest comes from industrial lands owned by logging, paper, and timber companies, etc. While 59% of that 89%, comes from non-industrial private forestlands owned by individuals, group associations, Native American tribes, etc. About 11% of the timber harvest in the U.S. comes from our national or state forestlands which account for 29% of forestland in the U.S. This is the challenge; how do private forest owners keep the forest healthy and meet timber demands when they only own 71% of the land but they provide 89% of the timber? And without private forests where would we obtain that timber?



**Figure 4:** In this graph “Other Public” refers to lands owned and operated by the Bureau of Land Management, state Departments of Natural Resources, or state forestry departments. “National Forests” are those forestlands managed by the U.S. Forest Service. “Forest Industry” refers to lands owned and operated by private industries; such as timber companies, paper factories, etc. And finally “Other Private” refers to those lands owned by private individual owners, such as family-run tree farms, individuals who own forestlands around their homes, etc.

Private forests are often close to cities and help protect the main **watersheds** in those areas. Forests are vital to watershed health. A watershed is the area of land where all of the water that is under it or drains off of it goes into the same place. Two-thirds of our country's freshwater supply originates in forests. Growing cities put many private forests in danger of becoming **developed areas**. A developed area is an area that has houses or commercial structures built on it. Private forestland owners may choose to divide and sell portions of their property to accomplish a personal goal or out of necessity. Usually such lands are developed, and new threats arise to the water quality, such as run-off from asphalt driveways and parking lots or heavily fertilized lawns. Run-off from driveways and parking lots can lead to erosion and added

soil deposits in streams and rivers. The fertilizers used on lawns can seep into the ground water or run-off into streams; adding contaminates to drinking water sources.

Privately owned forests also provide wildlife habitat. Wildlife is one of America's most treasured natural resources. Nearly 80% of this nation's wildlife habitat is spread over privately owned land. About 393 million acres of this privately owned land is forest land. Citizens who own private forests play an important role in managing and protecting our nation's wildlife. If these lands are divided and developed, wildlife that occupy these areas lose food sources, access to clean drinking water, and the freedom to move safely from place to place.

### **Private Forests Today and in the Future**

With private forestland owners facing so many challenges to keeping their forests sustainable for future generations, how do they decide how to manage their land? Many private forestland owners seek out assistance from a variety of sources. There are several agencies that have programs in place to help private landowners design a forest management plan that would fit their needs, as well as help them to maintain healthy forestlands. The Department of Natural Resources (DNR) in numerous states offer "Private Forest Land Programs" designed to help private landowners maintain sustainable lands. These programs often offer rewards for landowners who participate, such as state tax reductions.

The State and Private Forestry organization of the USDA Forest Service also provides support programs to help private forestland owners. One such program is the "Forest Stewardship Program," which is designed to help landowners develop forest management plans for their land. The Forest Stewardship Management Plan provides the landowner with forest management suggestions to help them meet their goals, while at the same time keeping the ecosystem healthy. Another program is the Forest Legacy Program (FLP), which protects private forestlands from being converted to non-forest uses. Private forestland owners may also seek to become Certified Tree Farms, in which case they would gain assistance in creating a forest management plan from a volunteer forester of the American Tree Farm System. Private forestland owners can find numerous programs to help them maintain healthy forestlands. Management practices on private forestlands impact the social, economic, and natural environment for everyone.

(Student Page)

## Worksheet 1: Family Owned Forest Facts

Name: \_\_\_\_\_

Table 1: Area and number of family owned forests in the Unites States\* by size of forest landholdings, 2004.

Size of Forest Landholdings (Acres)	Area (Acres) <i>Thousands</i>	Area (Percent)	Ownership (Number) <i>Thousands</i>	Ownership (Percent)
1-9	20,069	7.7	6,570	
10-49	61,681	23.6	2,970	27.8
50-99	41,815	16.0	632	
100-499	82,747		473	4.4
500-999	20,349	7.8	32	0.3
1000-4999	24,724	9.4	14	0.1
5000+	10,254		1	<0.1
<b>Total</b>	<b>261,639</b>	<b>100.0</b>	<b>10,692</b>	<b>100.0</b>

\* Numbers above are for the continental U.S. and exclude Alaska and Hawaii.

Table 2: Area and number of family owned forests in the Unites States\* by size of forest landholdings, 1993.

Size of Forest Landholdings (Acres)	Area (Acres) <i>Thousands</i>	Area (Percent)	Ownership (Number) <i>Thousands</i>	Ownership (Percent)
1-9	16,509		5,603	60.3
10-49	57,342	24.2	2,534	
50-99	42,729	18.0	642	6.9
100-499	78,461	33.1	472	
500-999	17,532		29	0.3
1000-4999	17,797	7.5	13	0.1
5000+	6,872	2.9	3	<0.1
<b>Total</b>	<b>237,242</b>	<b>100.0</b>	<b>9,296</b>	<b>100.0</b>

\* Numbers above are for the continental U.S. and exclude Alaska and Hawaii.

*These tables come from the USDA Forest Service, National Woodland Owner Survey and are draft figures. Designed for review purposes.*



(Student Page)

## Worksheet 1: Family Owned Forest Facts (Continued)

- 1) Fill in the missing percentages above and round your answers to the nearest tenth. Use the information in the “Area (Acres)” and Total Acres boxes to calculate area percentages in the blank “Area (Percent)” box. Use the information in the “Ownership (Number)” and Ownership Number Total boxes to calculate the percentages in the blank “Ownership (Percent)” boxes.
  
- 2) Using the information above what percent of land owners own 1-9 acres of land...
  - in 2004?
  - in 1993?
  
- 3) What percentage of land owned fits in the 1-9 acre category...
  - in 2004?
  - in 1993?
  
- 4) Using the answers to question 2 and 3, what does this tell you about the majority of private landowners in the United States for 2004?
  
- 5) Has there been an increase or decrease in the percent of landowners owning land in the U.S. in the 1-9 acre category since 1993?
  
- 6) When looking at the Area Percentages, which landholdings category (1-9, 10-49, etc) contains the greatest land area (percent)...
  - in 2004?
  - in 1993?
  
- 7) What percent of the ownership owned this landholdings category you discovered in question 6...
  - in 2004?
  - in 1993?
  
- 8) Has there been an increase or decrease in the percent of landowners owning land in the U.S. in the 100-499 acre category since 1993?
  
- 9) When comparing the table from 1993 to 2004 what appears to be the trend? Do more people own smaller portions of land or larger portions of land?
  
- 10) After answering number 9, what are some possible reasons the trend is going in that direction?

(Student Page)

## Tree Farm Story: Tree Farms in the U.S.

A Certified Tree Farm is a privately owned forest dedicated to producing renewable and sustainable crops of forest products while maintaining standards set by the American Forest Foundation. The term "**tree farming**" was selected to help the public understand the purpose of a Tree Farm. The public understood the word farming to mean continual production of goods/crops year after year. Farming was also associated with the idea of good land stewardship, or caring for the land to keep it fertile and producing. By linking the term "farming" with trees, people understood that Tree Farmers grew crops of trees and needed to keep forested lands productive over time. Tree farming implies commitment to the land and was very different to ideas the public had in the early 20th century. Tree farming in America began in response to concerns that America's private forests were being cut at an unsustainable rate without reforestation practices in place. The nation's first Tree Farm was dedicated on June 12, 1941 near Montesano, WA when the Weyerhaeuser Company dedicated 120,000 acres of company land as the Clemons Tree Farm. And by 1944, the American Tree Farm System began certifying the nation's private forests. Today about 60,000 certified forests with about 26 million acres of land are enrolled in the voluntary certification program offered by the American Tree Farm System.

Outreach and education are central to tree farm programs today. Tree farm programs work to promote the growing of renewable forest resources on private lands and to increase public understanding of all the benefits of maintaining healthy and productive forests. State forestry agencies provide a variety of assistance to private forest owners. They assist private forest owners to develop and implement forest management plans to deal with insect and disease outbreaks. They also help private forest owners sign up for various financial assistance programs offered by the government.

### The Greden Farm

One example of a private forest is the Greden Family Tree Farm in Minnesota. Ponderosa, is the name of this Tree Farm in Altura, Minnesota owned by Larry Greden and his family. Larry's great grandfather, Frank, originally settled on the property in Read's Landing in 1860. In 1866, Frank moved his family to the current 1,000-acre property. Family legend has it that, Frank was fearless. He was the only person to move bodies when diphtheria hit the community. And his daughter-in-law fed the outlaw, Jesse James. Peter (Frank's son) was known as a horse trader who almost lost the farm a few times. During the Great Depression, Leonard (Frank's grandson) cut branches to feed leaves to the cows and used wood from the land for fuel.

The Greden's Tree Farm is also a dairy farm, Greden's Ponderosa Dairy, with 600 head of cattle, and approximately 40 percent of the farm is woodland. Now, four generations of Greden's live on the farm that produces dairy products, timber, Christmas trees, and materials for a log cabin business. The Greden family takes full advantage of the recreation available right outside their back door – making the farm a place of pleasure, as well as work.

Larry makes forest management a priority on his property. In 1970, he planted thousands of trees and believes everything he does on the land must improve it for future generations. The family manages the Tree Farm for red oak, white pine, white and blue spruce and black walnut. The Greden's plan to return 100 acres of land back to prairie grass and prairie flowers.

## American Tree Farm System Standards for Tree Farm Certification

The American Tree Farm System has a set of standards that any private forestland owner must meet in order for their land to become a Certified Tree Farm. The certification process is voluntary and the landowner must have a minimum of 10 acres of forestland to be considered for Tree Farm Certification. A Certified Tree Farm must maintain standards set by the American Forest Foundation and can become decertified if it fails to continue to meet the standards. These standards have been revised several times since 1941 when the program officially began. The most recent set of standards began to be used on July 1, 2004. Forestland owners wishing to enter the American Tree Farm System have to meet the revised set of Standards of Sustainability for Forest Certification (Standards). These modified standards were approved for use in 2004-2008 and are the criteria for private forestlands to become Certified Tree Farms.

The 9 Standards for Tree Farm Certification for 2004-2008:

**Standard 1:** Ensuring Sustainable Forests – the forestland owner must promote the growing of renewable forest resources on private lands while protecting environmental benefits and increasing public understanding of all benefits of productive forestry. An accredited Tree Farm Inspector must inspect the land to see that it meets sustainability standards.

**Standard 2:** Compliance With Laws - Forest management of the private land must obey all relevant federal, state and local regulations and ordinances.

**Standard 3:** Commitment to Practicing Sustainable Forestry – Private forest owners must demonstrate their commitment to sustainability by developing and implementing a long-term forest management plan.

**Standard 4:** Reforestation - Forest owners must replant desirable species of trees, compatible with the ecosystems of the region, on harvested areas and unused areas where tree-growing is the intended land use.

**Standard 5:** Air, Water and Soil Protection - Forest owners must follow State Forestry Best Management Practices and comply with all relevant forest practices act(s) and ordinances in their state. The forestry practices on the land should maintain or enhance the environment, including air, water, soil, and site quality.

**Standard 6:** Fish, Wildlife and Biodiversity - Forest management activities should contribute to the conservation of biodiversity and maintain or enhance habitat for native fish, wildlife, and plant species on the land to be certified.

**Standard 7:** Forest Aesthetics - Forest management practices should minimize negative visual impacts of forest activities. Landowners must manage their forest with concern for visual impacts.

**Standard 8:** Protect Special Sites - Special sites are managed in a way that recognizes their unique characteristics. Forest management practices must recognize historical, biological, archaeological, cultural, and geological sites of special interest.

**Standard 9:** Wood Fiber Harvest and Other Operations - Wood fiber harvests and other forest operations are conducted in accordance with the management plan and with sensitivity to other forest values (e.g., water quality, regeneration, wildlife habitat, biodiversity, special sites, etc.).

## Interview: Student Directions (Student Page)

### Interview a Tree Farmer or Private Forestland Owner

Imagine you are the town historian at the local town library and your job is to write a Forestland History essay on a local tree farm in your state. In order to complete this task you will need to interview a local Tree Farmer or Private Forestland Owner in your area. After conducting this interview you will then write your short historical essay on this person and their land. If you prefer to create a documentary film, or record an oral history, you may also do that.

What information are you looking to gather? You should pick 8 of the following questions you would like to use for your interview. Then add 2 or 3 of your own additional questions (that are of interest to you or that you would like answered).

- How long have you or family owned this land?
- What do you do with this land (use it for timber? Development? recreation? etc)
- Do you know the land use history of this property? What did the previous owners do with this land? Or what did your ancestors do with this land?
- Who owned this forest before you?
- Is your forest a second generation forest?
- Why do you own private forest land?
- How do you maintain the forest land? (Do you get help from a state forester or your local Tree Farm Association?)
- Do you feel you are maintaining a sustainable forest?
- What is your biggest concern with regards to your land (i.e. wildfire, insects, invasive species, Endangered Species Act, trespassers, taxes)?
- What do you hope for the future of your land? (Do you hope to sell it? Do you want it to be passed down to your children?)

To find a local Tree Farmer in your area, contact the head of the state committee of the American Tree Farming System programs in your state at <http://www.treefarmssystem.org/cms/pages/35.html>. Or contact your Local State Forester (at <http://www.stateforesters.org/SFlist.html>), to help find a local tree farmer or private forestland owner in your area. You may also wish to contact these people, if you have specific questions about tree farming in your state.

## Interview: Checklist (Student Page)

- \_\_\_\_\_ Find a Tree Farmer/Private Forestland Owner to interview (this may be provided to you by your teacher) **Due Date:** \_\_\_\_\_
- \_\_\_\_\_ Contact the Tree Farmer or Private Forestland Owner to set up an interview. **Interview Date:** \_\_\_\_\_
- \_\_\_\_\_ Create your Interview Question List; choose the 8 interview questions you would like to use and write your additional 2 or 3 questions.
- \_\_\_\_\_ Turn in your Question List to be reviewed by your Editor (teacher) **Due Date:** \_\_\_\_\_
- \_\_\_\_\_ Conduct your interview; take notes, record interviewees answers (be sure to get permission before recording your interview).
- \_\_\_\_\_ Write your historical essay or edit & create your documentary film, or oral history tape/CD.
- \_\_\_\_\_ **Final Project due:** \_\_\_\_\_

## Private Forestlands and the Challenges They Face

 (Student Page) - **WORK IN PROGRESS**

“This land is mine, mine to use and enjoy, mine to treat as I wish.” How true is this statement? Local, state and federal governments pass laws and ordinances that have an impact on land use rights. Obviously landowners have many rights to the properties they own, but that doesn’t mean they have all rights. Recently, various actions by governments and courts suggest that the property rights of private land owners can be shared with the public and that these rights can be limited. For example, homeowners’ property rights are often limited by rules and regulations within their Home Owners Association. You may own a house but you must seek permission from the Home Owners Association to build a deck on the back of your house. Another example: you may own several hundred acres of private land that you would like to develop into new homes. Yet you must receive permits from the state and the city or county to develop this land. You may be required to have a certain amount of Open Space in your development or you may be required to build a certain number of affordable homes. And yet another example of limits to your landownership rights: you may own a private forest that contains vital habitat for the Spotted Owl or the Red Cockaded Woodpecker. Now your timber harvesting is limited due to the Endangered Species Act.

The conservation of native plant and animal species is an important national goal of the United States. President Richard Nixon signed the **Endangered Species Act** into law in 1973. Today the Endangered Species Act (ESA) is thought of as one of the nation’s main tools for conserving threatened and endangered species. The purpose of the Endangered Species Act is to protect and recover plant & animal species in danger of extinction, as well as the ecosystems on which they depend. Of the known threatened or endangered species in the United States, many exist within, or depend upon, forested ecosystems. Private property is very important in the management and conservation of Threatened & Endangered species because 75 percent of them occur on private land. Much of the 747 million acres of forestland in the U.S. is privately owned. In fact, over 60 percent is privately owned—a percentage that increases east of the Mississippi River to over 90 percent in Maine. So, how does the Endangered Species Act affect private forestland owners?

Tree Farmer and forester Jeff Hughes has been involved in the environmental aspect of tree farming for more than 20 years. He currently manages his own 200-acre tree farm, which straddles the Louisiana and Mississippi border. He also continues to monitor national and state issues through the Louisiana Forestry Association. Prior to his retirement, Mr. Hughes worked for Crown Zellerbach, a large forest industry in the U.S. In 1972 the **Clean Water Act** was passed and one of Mr. Hughes main jobs became putting together environmental guidelines for the company’s activities. The stated objective of the Clean Water Act (CWA) is “to restore and maintain the chemical, physical, and biological integrity of the Nation’s waters.” The CWA protects wetland areas in the U.S. and therefore can have an effect on private forestland owners. Mr. Hughes is a member of the American Tree Farm System (ATFS), an organization “committed to sustaining forests, watershed and healthy habitats through the power of private stewardship.” Mr. Hughes was interviewed by ATFS in which he was asked: “Is wetlands regulations the greatest challenge facing tree farmer’s in the South?”

Mr. Hughes response: “Well, that and the Endangered Species Act regulations. I’m sure you’re familiar with what’s happened out in the Pacific Northwest as a result of the Spotted Owl. Now there’s a big battle getting started here in the South and Southeast over the Red-Cockaded Woodpecker. And I understand there are some 700 more species that have been nominated for listing. A large number of these affect the way a tree farmer can manage his land. We’re beginning to feel the impact of the Red-Cockaded Woodpecker pretty strongly already. The Forest Service has reduced the level of its sales of timber as a result of it. Private landowners are grappling with the problems connected with how to manage their land at the same time protect the Red-Cockaded Woodpecker and meet the requirements of the regulations. The requirements of the regulations have not been made very clear to tree farmers, so there’s a lot of uncertainty and feeling of dread on the part of landowners who just don’t know what to do. The same situation also exists with the gopher tortoise, which is another endangered species.”

Owning property in the U.S. is often thought of as the American Dream, but that does not necessarily mean you own all the rights to that land. In the end the best interest of the nation as a whole come into play. Just like you cannot do whatever you want, whenever you want in school. Property owner have restriction on what they too are allowed to do.

## Investigative Report: (Student Directions) - **WORK IN PROGRESS**

You have just read about one type of challenge, U.S. federal laws, that may arise for private forestland owners. Other concerns for private forestland owners may include: insects/pests invasions, fire threats or wildfires, land fragmentation, and the availability of scientific information. Forestland owners often face insect invasions or fire threats on their land and then they are forced to make a decision on how to combat these issues. They do not always have the financial resources or the latest technology to fight back to protect their land and its timber resources. Another issue mentioned is land fragmentation. Sometimes private forestland owners find that they can make more money selling part or all of their land to be fragmented for development rather than selling all of the land to remain in one piece or than selling the timber on that land.

You are an investigative reporter and your mission in this assignment is to investigate issues that face private forestland owners. You may find articles in magazines or newspapers, and provide a follow up report to these stories. You might find information on an internet search to report on. Or you may consider conducting an interview of a private forestland owner about issues s/he faces on their property. Basically you are to find one issue facing private forestland owners and report on this issue. You may write an article, create a TV report or a radio broadcast. Here are the main questions you will need to answer. What is the issue? Give a detailed report on the issue, you chose, that is facing private forestland owners. What impact does this issue have on private forestlands and their owners? How do the private forestland owners deal with this issue?



## Investigative Report Checklist: (student page)

\_\_\_\_\_ Conduct initial research on issues facing private forestland owners and choose the topic on which you will report.

**Turn topic choice into teacher on:** \_\_\_\_\_ (due date)

\_\_\_\_\_ Conduct more detailed research on your chosen topic. Be sure to find answers to all of the questions listed in the directions.

\_\_\_\_\_ Write your investigative article or create your investigate TV report or radio broadcast.

\_\_\_\_\_ Edit your investigative article, TV report, or radio broadcast.

\_\_\_\_\_ **Turn in Final Project, Due:** \_\_\_\_\_

\_\_\_\_\_ Give a 2-3 minute “brief” to the class on your findings. Participate in the follow-up class discussion.