



# Unit 14: Preserving New Hampshire

In this unit:

Section 1: Introduction

Section 2: Protecting the Environment

Section 3: New Hampshire's Forests

Section 4: Saving Franconia Notch

Section 5: New Hampshire's Waterways

Section 6: Modern Environmentalism

## Section 1: Introduction

How do you balance the needs of people and businesses while protecting New Hampshire's natural resources? As more factories opened in the Granite State in the 19th century, it became harder to take care of the natural resources in New Hampshire. Some natural resources, like forests, were used up faster than they could regrow. Others, like the state's lakes and rivers, became polluted. Over time, the people of New Hampshire found ways to protect the environment while still allowing businesses and factories to thrive.

As you learn about New Hampshire and its efforts to protect the natural world, think about the following questions:

- How did industrialization threaten the landscape in New Hampshire?
- How did people work together to protect the environment in the Granite State?



## **Section 2: Protecting the Environment**

*How were New Hampshire's natural resources threatened in the 19th and 20th centuries?*

For thousands of years, New Hampshire had plenty of natural resources to support life here. Forests, rivers, and lakes covered the land, providing a place to live for trees, plants, animals, fish, and the native Abenaki people.

When English settlers came to New Hampshire in the early 17th century, they developed industries that used these natural resources. They caught fish in New Hampshire's waterways and then shipped the fish they caught to Europe where the fish fed millions of people. The colonists cut down trees in the forests to build their settlements and to sell to other places in the world that needed lumber. Settlers trapped beaver so they could sell the fur to people in Europe, where beaver pelts were used to make hats and coats.

These industries helped New Hampshire grow during the colonial period. More people moved here, and they built towns and businesses that used the natural resources around them.

In the early decades of the 19th century, new industries developed in New Hampshire that used even more of the state's natural resources. Textile mills and factories were built along the state's many rivers. The machines in the factories were powered by the water flowing in the rivers.

Cities grew up around the biggest factories in New Hampshire, but almost every town in the state had at least a small factory that used the water from nearby rivers to provide power.

New Hampshire's lumber industry became one of the most important businesses in the state. People who worked for the lumber industry cut down trees and cleared forests so that lumber could be sold to people who lived in cities far away. Some factories in New Hampshire used the trees to make paper, which was used all over the country to print newspapers and books.



By the middle of the 19th century, New Hampshire had developed another new industry that became very important to the state's economy: tourism. People came from all over the country to see the beautiful scenery in New Hampshire. Tourists visited the White Mountains and the Isles of Shoals. They spent time in the Lakes Region and exploring Mount Monadnock. Visitors traveled all over the state to enjoy the state's natural resources.

But visitors also changed the landscape. People built hotels and restaurants so that visitors had places to stay and eat. They built roads and railroads so visitors could get to New Hampshire and move around the state once they were here. Stores opened to sell souvenirs to tourists. Trails were cut into the sides of mountains so visitors could climb to the top and look around. All of these developments changed the landscape and consumed natural resources.

By the second half of the 19th century, New Hampshire's natural resources were in trouble. Industries were using up the trees and destroying the forests. Factories were changing the water levels in the rivers and lakes to keep their machines working.

The state's population had grown by tens of thousands of people, who needed to be housed and fed. They also produced garbage and waste. So did all the visitors who came to the state every year.

Granite Staters began to worry that the natural resources that made their state a nice place to live would disappear. They also worried that if the state's natural resources were used up, they would lose their jobs.

Tourism and factories were important to New Hampshire. Most people in New Hampshire worked in one or the other of these industries. These industries also brought a lot of good things to the state, including all sorts of modern developments, like railroads, cities, and electricity.



Granite Staters needed to find a way to make natural resources last longer and keep New Hampshire beautiful. Lots of people began to look for ways to protect New Hampshire's natural resources.

Other Americans were also worried about natural resources and how fast they seemed to be disappearing. Many of them believed that people could solve these problems by working together. They also believed that the government could play a role in protecting the environment, which was a new idea for Americans.

### **Let's Review!**

*What are the big ideas in this section?*

1. **Abundant Natural Resources:** New Hampshire has tons of resources that support life, including many waterways, thick forests, and abundant plant and animal life. These resources developed over thousands of years and sustained the indigenous Abenaki as well as the settlers who arrived after 1600.
2. **Water, Trees, and Tourists:** Settlers to New Hampshire created industries that relied on natural resources, particularly water to power factories and trees that supported the lumber industry. The state's natural resources also brought tourists, which was another important industry.
3. **Threats to Nature:** People began to worry in the late 19th century that the state's natural resources were being used up, which would destroy NH's industries and strip the state of its natural beauty.
4. **Protecting the Environment:** People in New Hampshire decided to take action to protect the state's natural resources and that the state and federal governments should play an active role in helping them.



## Section 3: New Hampshire's Forests

*How were New Hampshire's forests threatened?*

For centuries, trees were some of New Hampshire's most important natural resources. Thick forests covered the land when the first Europeans arrived here in the early 1600s. Many of the forests in southern New Hampshire got used up in the 18th century and the 19th century. In northern New Hampshire during this period, it seemed like the forests in the White Mountains would last forever.

But beginning in the late 19th century, even the forests in that part of the state started to suffer. Timber companies purchased thousands of acres of land in the White Mountains and began to harvest the trees, which made many different types of products that were in high demand, like the bobbins that were used in textile factories. Trees were also used to make paper for things like newspapers and books. These products were used by Americans all over the country.

Cutting down so many trees caused all sorts of problems in the White Mountains, though. Huge sections of the mountains were cleared of trees entirely in a practice called clear-cutting. That means that instead of cutting down some trees in an area and leaving others to grow, lumber companies cut down all the trees so that the only thing left behind were stumps and debris.

Clear-cutting was very hard on the environment because trees play an important role in nature. Other plants and animals depend on trees for food and protection. The root system of trees help hold the soil in place. When it rains or snows in the White Mountains, the soil is much more likely to shift and cause mudslides or avalanches in areas that were clear-cut. The soil from clear-cut areas also slips into waterways and clogs up rivers and lakes.

With less water flowing through the state's rivers, the factories that used water power had trouble getting enough energy to run their machines. Since



factories were an important part of the economy, the rivers needed to flow with lots of water or the factories would go out of business.

The loss of trees also impacted New Hampshire's other big industry: tourism. The thousands of people who came to New Hampshire every year wanted to see its natural beauty, not look at tree stumps and barren mountainsides.

Clear-cutting also led to terrible forest fires. The timber companies took the large trees and sold them, but they left behind on the ground lots of small trees and branches, which dried out after they had been cut down. This leftover material was called slash, and it caught on fire very easily.

Between 1875 and 1915, forest fires became a big problem in the White Mountains. The year 1903 was the worst year of all. There were more than 500 fires in the White Mountains in that year alone. The ash from the fires was blown all over the state. Tourists could not enjoy the state's scenery and worried that they would be injured if the fires burned down their hotels. It seemed like the White Mountains were being destroyed.

*How did the people of New Hampshire save the White Mountains?*

Even before the terrible fires of 1903, Granite Staters began to organize to save the forests. In 1893, the state government formed a committee called the State Forestry Commission. The committee started looking at ways to protect parts of the White Mountains.

About 10 years later, a group of citizens formed an organization called the Society for the Protection of New Hampshire Forests (SPNHF). The people who joined this group believed the government should pass laws to protect the environment. They convinced the state legislature to appoint a state forester.

The SPNHF also found other ways to protect the White Mountains. They taught the public about the environmental threats to the forests by



publishing articles in newspapers and magazines. They gave talks and lectures to the public about what was happening in the White Mountains. The group worked with the lumber companies to find ways to harvest trees that didn't cause so much environmental damage. They also bought as much land in the White Mountains as they could and convinced other people to donate land so the forests could be protected.

The SPNHF wanted the state to take over the White Mountains so that the land could be saved for the public. The idea was that some of the land could be harvested to support the lumber companies, while the rest of the land could be protected and used as parks. Granite Staters and all the tourists who came to New Hampshire could use the land for recreation. But the state government did not have enough money to buy all this land.

Since the state government couldn't save the White Mountains, the SPNHF turned to the federal government. The group worked together with many other organizations in New Hampshire, like women's clubs, business leaders in industry and tourism, and the Appalachian Mountain Club, which was formed to encourage hiking.

This group of organizations and business leaders worked with a U.S. congressman from Massachusetts named John Wingate Weeks. He was originally from Lancaster, New Hampshire, and he loved the White Mountains. In 1911, Weeks got a law passed by the federal government that allowed the U.S. government to buy land and create national parks. The federal government started buying land in New Hampshire, and in 1918, the U.S. government owned enough land to create the White Mountain National Forest. It was the first national forest created in the eastern part of the United States.

Once the White Mountain National Forest was created, the federal and state governments, the SPNHF, the timber industry, and many other groups worked together to repair all the damage that had been done to the landscape in that part of the state.



Now, the White Mountains support both the timber industry and the tourist industry. It also offers lots of opportunities for people to enjoy the state's natural resources in a way that makes sure those resources will last for a very long time.

## **Let's Review!**

*What are the big ideas in this section?*

1. **NH's Lumber Industry:** There were many companies that harvested lumber in New Hampshire and sold it all over the world. New Hampshire lumber companies also made paper, which was used throughout the country for newspapers and books.
2. **Damage to the Forests:** Lumber companies in the 19th century did a lot of damage to the forests through practices like clear-cutting. These practices destroyed the forests, clogged up the state's waterways with silt and debris, and caused devastating wildfires.
3. **Society for the Protection of NH Forests:** Citizens came together to form a grassroots group to save the forests. The SPNHF raised public awareness, prodded the state government to take action, and worked with lumber companies to take better care of the forests.
4. **White Mountain National Forest:** The federal government passed the Weeks Act in 1913, which allowed the government to buy land in the White Mountains and create a national forest. It was the first national forest in the eastern United States.





## **Section 4: Saving Franconia Notch**

*How did the public save Franconia Notch?*

The White Mountain National Forest protects a lot of land in the White Mountains, but not all of it. Some land is still owned by timber companies, hotel owners, or individuals. Although most of the well-known landmarks are now owned by the state or federal governments, in the early part of the 20th century, many of these sites were still in private hands.

For many years, Franconia Notch was owned by a family that ran a popular grand resort hotel called the Profile House. Thousands of people came to stay at the Profile House over the years, where they could get a great view of the Old Man of the Mountain. In fact, the same family also owned the Old Man and other famous tourist spots in the area: the Flume Gorge and Profile Lake.

In 1923, the Profile House burned down, and the family that owned it decided they wanted to sell their land in Franconia Notch. Some timber companies were interested in buying the land because it was heavily forested, but the family first approached the state government. The family offered to sell it to the state for \$400,000.

The state government agreed to pay half of the price, but it couldn't afford to pay the full amount. The last \$200,000 had to be raised by public donation.

The Society for the Protection of New Hampshire Forests (SPNHF) and the New Hampshire Federation of Women's Clubs joined together to organize a public campaign to raise the money.

These two groups used the Old Man of the Mountain to promote their fundraising effort. They believed that the Old Man was a national treasure, and everyone should want to save it. National magazines ran stories about



the Old Man of the Mountain, which made it a familiar landmark to people all over the country. It became a symbol of America's natural beauty.

The two groups also organized ways for people to contribute money to help buy the land in Franconia Notch.

One way people contributed was to "Buy a Tree for a Dollar" in Franconia Notch. For a \$1 contribution, a person could adopt a tree in the notch. They got a certificate in the mail showing that they owned a tree, although they couldn't cut the tree down or harm it in any way. Instead, their contribution went to save the tree by preserving it in a park.

School children also got involved in the fundraising campaign. The state declared January 28, 1928, to be Franconia Notch Day. Students spent that day learning all about the notch, including its natural features, history, legends, and stories. The kids also brought pennies and nickels to school that day to contribute to buying the land.

Grassroots efforts like this—where people come together and made small contributions that add up to big changes—helped save Franconia Notch. In September 1928, the state officially bought the notch, including the Old Man and the Flume. The land bought by the state eventually became a state park that you can still visit today, even though the Old Man of the Mountain collapsed in 2003.

The effort to save Franconia Notch was one of the most important public environmental campaigns of the early 20th century because it reminded all Americans that natural resources needed to be protected. It also showed how grassroot campaigns could make a big difference!



## **Let's Review!**

*What are the big ideas in this section?*

1. **Tourist Sites:** Some of New Hampshire's most popular tourist sites are located in Franconia Notch in the White Mountains, including the Old Man of the Mountain, the Flume Gorge, and Profile Lake. before the 1920s, this land was privately owned by one family.
2. **Selling Franconia Notch:** When the family decided to sell their land in Franconia Notch, they offered to sell it to the state government instead of to lumber companies. The state government contributed half of the amount needed to buy the land but said the other half needed to be raised by the public.
3. **The Old Man as National Symbol:** The people who wanted to save the notch started a national campaign to bring attention to their efforts. The Old Man of the Mountain was used in advertisements and on posters. The rock formation became famous as a national symbol of American determination.
4. **Public Campaign:** The money needed to buy the land was raised in several different ways, including the "Buy a Tree" campaign and a big effort by the state's schoolchildren. After the land was purchased by the state of New Hampshire, it was turned into state parks so everyone could enjoy it.



## **Section 5: New Hampshire's Waterways**

*What environmental challenges threatened New Hampshire's waterways?*

New Hampshire's forests weren't the only natural resources that were threatened in the state. The lakes and rivers in New Hampshire were also in danger of becoming too polluted to use.

New Hampshire is full of lakes and rivers. In fact, there are over 1,300 lakes and ponds in the state, and over 40,000 miles of rivers and streams. That's a lot of waterways!

Water has also been very important for New Hampshire's development. Plants, animals, and people all need water to live and grow. The Abenaki used New Hampshire's waterways to travel from one place to another. When European settlers arrived in New Hampshire in the early 17th century, they used the waterways to get around too. They also hunted the beaver who lived in the waterways. The farmers who came to New Hampshire used water to support their crops and livestock.

When factories were built in New Hampshire in the early 1800s, they used the water to power their machinery. The Industrial Revolution became so important to New Hampshire because there were so many lakes and rivers to support all the mills.

But industrialization also harmed the waterways. Factory owners built canals to manage the flow of the water, since the water provided the power for their machines. They wanted to make sure the water flowed when they needed it to. By changing the water's flow, they often damaged the waterway and changed its natural course.

In the 19th century and the 20th century, factories also dumped a lot of chemicals and waste in the rivers, which polluted them. People even dumped their garbage and trash in the waterways. All this waste material clogged up the rivers and stopped water from flowing the way it had in the past.



Many of the fish in the rivers and lakes died because the water was too polluted for them. A lot of other people and animals couldn't drink the water in the rivers and lakes anymore because it made them sick. New Hampshire's waterways, which had once been among our most precious natural resources, seemed to be dying.

In the 1950s and 1960s, people in New Hampshire began to realize that the waterways were important natural resources that needed to be cared for and protected. In fact, many Americans were becoming more concerned about the environment at this time. People demanded that the state and federal governments take action to protect these natural resources.

Political leaders worked with grassroots activists, and sometimes with business leaders, to pass laws to limit pollution. The state and federal governments cleaned up places that had become very polluted and sometimes forced companies to clean up the pollution they made.

The public also became more aware of the role they played in pollution. Some communities organized clean-up days when volunteers picked up trash. People started to become less tolerant of littering. There were even public awareness campaigns to explain to people how littering contributed to pollution and harmed the environment.

Most of New Hampshire's waterways were cleaned up during this time. Everyone started to see that they had to do their part to control pollution.



## **Let's Review!**

*What are the big ideas in this section?*

1. **New Hampshire's Waterways:** New Hampshire has thousands of miles of lakes, rivers, streams, and seacoast. All of this water has supported life for millions of years.
2. **Water for Industry:** During the Industrial Revolution, NH factories used water to power machinery and make products that were sold around the world.
3. **Flow and Pollution:** Factory owners changed the amount of water flowing in the state's rivers so they could control the source of power. Factories also dumped chemicals and waste into the state's waterways, which polluted them.
4. **Cleaning the Water:** Groups of concerned citizens, the state government, and industry leaders worked together to clean up the state's waterways in the middle of the 20th century.



## **Section 6: Modern Environmentalism**

A lot of the worst pollution in America—and in New Hampshire—was cleaned up in the mid-20th century, but everyone recognized that they had to pay more attention to taking care of the environment to protect our natural resources for generations to come, which is known as environmentalism.

Environmentalism became very popular throughout the United States in the 1960s and 1970s. In fact, in 1970, Americans organized the first Earth Day, which was a way to celebrate the planet on which we live and remind people that our natural resources need to be protected. Americans became much more focused on finding ways to control pollution during this period. Grassroots activists also worked with the state and federal governments in a partnership to do so. Some businesses have joined this partnership, while other businesses have not.

### **Finding Energy Sources**

*How has the need for energy threatened the environment?*

Throughout the 20th century, Americans became more dependent on energy in their daily lives.

Water and steam had long been important to power New Hampshire's factories, which was one of the reasons why the state's rivers needed to be protected. But in the 20th century, people began to use electricity to run their lights, appliances, and eventually their computers. As cars became more popular in the early 20th century, people started using gasoline to power them. And instead of heating their houses by burning wood in their fireplaces as they did in the 17th century, 18th century, and 19th century, people started using heating oil to run furnaces that kept their houses warm in the winter. These new inventions needed energy to work, but getting that energy from the planet often uses up lots of natural resources and generates pollution.



**Olympic Oil Refinery.** In 1973, a Greek billionaire decided to build an oil refinery on New Hampshire's Great Bay. He planned to ship oil to the coast of New Hampshire in giant supertanker ships and then pump the oil in underwater pipelines to an oil refinery. There, the oil would be processed so that it could be used as energy. Eventually, the company that owned the oil refinery would sell the oil.

Some Granite Staters liked this plan because the oil refinery would bring jobs to the state and it would lower the price of oil for everyone.

Other Granite Staters did not like this plan because they worried about the environmental damage that could happen if there was an oil spill. If there was an accident with one of the supertankers, or a leak in the underwater pipes, or a problem at the refinery, billions of gallons of oil could be dumped in New Hampshire. An accident like that would kill all the plant and animal life and destroy New Hampshire's natural resources in that area of the state.

A group of people in the seacoast region joined together and formed an organization called Save Our Shores. They brought the public's attention to the oil refinery project and explained how much damage it could cause to the environment.

Because the oil refinery was going to be located in the town of Durham, the people of Durham got to vote on the idea at their town meeting in March 1974. They voted against the project, and the oil refinery was not built.

**Seabrook Nuclear Power Project.** Only a few years later, environmentalists were not able to stop another project in the seacoast region. This project was to build a nuclear power plant in the town of Seabrook.

Nuclear power is a kind of energy that was developed in the middle of the 20th century. It can generate lots and lots of power, but it can also cause lots of damage to the environment and to people, especially if there is an accident at the nuclear power plant.





Just like with the Olympic Oil Refinery, some people in New Hampshire liked this idea because a nuclear power plant needs lots of workers, so people could get jobs there. It also produces energy at a low price so it would be cheaper for everyone.

But other people worried that the risk of generating nuclear power was too great and that it might harm the environment too much.

In 1976, grassroots activists formed a group called the Clamshell Alliance to fight against the Seabrook nuclear power project. Like Save Our Shores, they tried to raise public awareness of the dangers of nuclear power. They also tried to get the state government to stop the project.

Although most people in New Hampshire were against the project, it moved forward anyway. The Seabrook Nuclear Power Plant opened in 1990 and is still in operation today.

**Northern Pass.** Almost 100 years after the Society for the Protection of New Hampshire Forests (SPNHF) saved the White Mountains, a new threat to them emerged called Northern Pass.

An energy company in New England and an energy company in Canada came up with a plan to run giant power lines through the White Mountains to bring energy from hydroelectric dams in Canada to New England. The companies said that the project would bring down the cost of electricity for Granite Staters and other New Englanders. In order to do that, though, the companies would need to cut down a lot of New Hampshire's forests and build big towers to hold the power lines.

The SPNHF organized a public campaign against Northern Pass, and thousands of people contacted their representatives in the state government to stop the project. They argued that cutting down so much of the forests would ruin the state's tourist industry, which was very important to the economy in New Hampshire.



The state government stopped the project from moving forward. When the two companies sued the state government in 2018, the case went to the N.H. Supreme Court, which ruled in favor of the state.

## **Protecting the Land**

*How have Granite Staters protected the land in recent years?*

New Hampshire has a long tradition of protecting the natural landscape, starting with the effort to save the state's forests in the 1890s. As more people and businesses have moved into New Hampshire, the state government has gotten more involved in protecting the state's natural resources. The public is also more aware now of the need to protect the land and the environment for future generations.

**New Hampshire State Parks.** One way the state has protected land is by creating a network of state parks. Today, there are 93 state parks and recreation areas in New Hampshire, which include beaches, campgrounds, natural areas, ski areas, trails, and historic sites. Almost 10 percent of New Hampshire is protected in this way.

**LCHIP.** The state government also runs a program called the Land and Community Heritage Investment Program (LCHIP), which provides money to towns and community groups to buy and protect natural and historic sites. LCHIP helps to keep the sites open to the public and safe from development.

Some of the money to support LCHIP comes from the Moose Plate program. Granite Staters can pay a little extra to buy a license plate with a moose on it. The extra money goes to LCHIP.

## **Climate Change**

Over the past several decades, the climate of New Hampshire—and the world—has been changing too quickly. Most of this change is due to things



people do, especially activities that burn a lot of fuel, like powering factories and driving cars.

Because of these activities, the earth is warming up faster than it should, which is called global warming. If the world gets even a few degrees warmer, it can have a big impact on the environment. The weather will get more unstable and extreme. We could have colder winters and hotter summers. There will also be more big weather events, like hurricanes, tornadoes, and storms.

Global warming also leads to geological change, like the melting of the glaciers at the North and South Poles. When the glaciers melt, the level of the water in the oceans will rise. It will affect weather all over the globe.

In the early 21st century, many organizations and businesses have changed how they do things because of climate change. The New Hampshire Historical Society, for example, made a lot of changes to its building so that it doesn't need as much energy to heat or cool. These changes reduced the carbon footprint of the building, so that it won't contribute to climate change.

Granite Staters have also been working to find new sources of energy that don't harm the environment, including solar power and wind power. These types of power generate electricity that can be used for all sorts of things, like heating houses and running cars. Because they will never run out, solar power and wind power are called renewable energy. They don't use up the state's natural resources.

The state government also works with businesses and community groups to manage our natural resources. That way companies can run their business while the public gets to enjoy New Hampshire's scenic beauty and recreational opportunities.



## **Let's Review!**

*What are the big ideas in this section?*

**Environmentalism:** In the late 20th century, Americans became more concerned with protecting the environment and demanded that the government take steps to preserve our natural resources.

**Sources of Energy:** One of the biggest challenges of the modern era is finding new forms of energy to provide power for all things people need without harming the environment. In NH, some energy projects have been created while concerned citizens have stopped other projects.

**Public Private Partnerships:** In the 20th century, the government began working with citizens groups and businesses to find ways to protect natural resources. These partnerships have worked to balance the needs of everyone.

**Climate Change:** Today, climate change threatens to destroy our natural resources because the earth is warming up too fast. The private-public partnership can work to find ways for us to do less damage to the world around us.