

Industry and the Environment

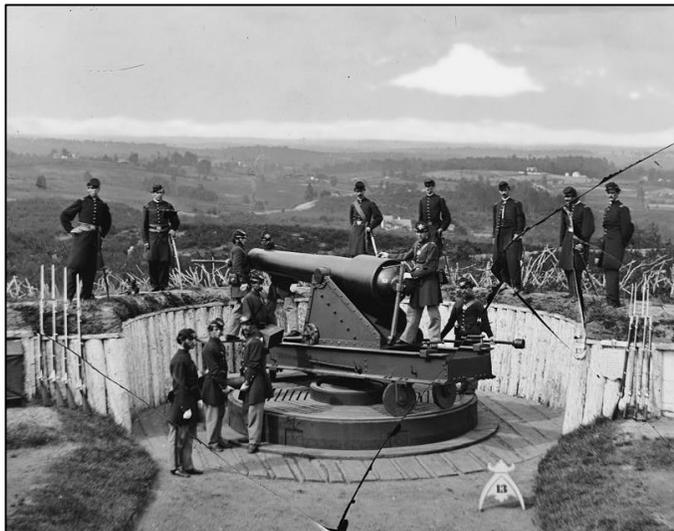
Storm King on the Hudson depicts the worlds of man and nature colliding. The painting depicts a typical day along the heavily trafficked Hudson River in New York State. The idyllic Storm King Mountain provides a scenic background for the steamboats, sailing ships, and rowboats that populate the river. While beautiful, the scene carries a message about the environmental impact of man on the natural world. It was during the time Samuel Colman painted *Storm King* in 1866 that issues such as preservation and development began to arise, though they did not fully gain traction until the 1880s.

Colman gave "equal time" to both sides of the discussion by dividing his paintings neatly in half. An 1866 review in *New York* magazine stated that the painting of *Storm King on the Hudson*, "marks the moment when paradise was invaded by men of commerce... Painters were left with a problem: what to do about the tanning factories, sawmills, paper factories, and the other small businesses that started to overtake the epic waterfalls and elegant forests along the Hudson."

In the seventeenth century, ships on the Hudson carried fur pelts from upstate New York and Canada to **New Amsterdam** where they could be shipped overseas to Europe. Early northbound traffic on the river carried mostly manufactured goods, rum, fabric, and other supplies that could not be obtained in the Hudson Valley. Timber from the Adirondack region was also a major cargo on the river, and sawmills operated along the river at Newburgh, Albany, Poughkeepsie, and other towns.

But by the mid-1800's, the banks of the Hudson River had given rise to several industries served by river vessels, most importantly the iron foundries. The opening of the Erie, Champlain, and Delaware-and-Hudson Canals in the 1820's made it possible to ship iron ore and fuel (later timber and coal) from further upstate and Pennsylvania by sloop and barge to these foundries. Finished products could then be transported down the Hudson to New York City or back up the canals to the Great Lakes and Canada. There were smelting furnaces at Peekskill and Poughkeepsie, and foundries at Hudson, Kingston, Newburgh, Troy. Cold Spring (not far from Storm King Mountain) was at one point the largest iron foundry in the United States. After the War of 1812, the federal government subsidized the establishment of the West Point Foundry at Cold Spring, near the military academy at West Point. The foundry produced a long-range cast iron cannon, whose effectiveness foundry superintendent **Robert Parrott** tested by shooting it across the river at Storm King and Crow's Nest Mountains. This cannon later came to be known as the **Parrott cannon**. During the Civil War, the foundry employed 1400 workers and played a major role in the Union's military success. The West Point Foundry also made parts for

steamboats, locomotive engines for railroads, iron pipes for city water systems and cotton presses for the textile industry. Burden Iron Works at Troy, New York manufactured cast iron stoves and perfected a mechanized process for making horseshoes, while Uri Gilbert and Son made **gun carriages** for the federal government. The federal government commissioned from Albany and Rensselaer Iron Works in 1861 the navy's first ironclad vessel, the *Monitor*, which served the Union in the Civil War.



Parrott gun at Fort Totten, District of Columbia, 1865, William Morris Smith, Library of Congress

Iron was not the only natural resource found in the area; sawmills were incredibly prevalent in the area. In 1833, thirty-three sawmills operated in the town of Moriah, New York alone. Not only were hardwoods cut down for lumber, but they were also used to make charcoal to supply the forges and blast furnaces that processed the iron ore. In *The Iron Mine, Port Henry, New York*, you can see that most of the trees on the lakeshore and on the cliff are very small. One tree in the middle ground on the left side of the painting leans towards the water, as if uprooted. The area surrounding the lake was once populated by hardwood forests, but those were mostly depleted by the time Martin painted this work. By the mid-nineteenth century, when the hardwoods became depleted and transport of freight in and out of Port Henry improved with the canal and railroad, many of the furnaces converted to coal.

Storm King and the Modern-Day Environmental Movement

In the late twentieth century, Storm King Mountain became a media symbol of a burgeoning environmental movement. From 1963-1980, Storm King became the focus of a controversy that was to have a profound impact on environmental protection. In 1962, the Consolidated Edison (Con Ed) power company submitted a plan for a hydroelectric power plant to be built into the side of Storm King Mountain, facing the Hudson River. The facility was designed to hold a large amount of water in storage for generating power through hydroelectric turbines. Since New York City's power needs were growing rapidly, Con Ed wanted a back-up power supply in times of peak usage. The environmental organization Scenic Hudson was organized to protest the proposed plant and testify at Federal Power Commission (FPC) Hearings. When the FPC initially granted Con Ed a license in 1965 for the Storm King plant, Scenic Hudson decided to appeal the

FPC's decision, and won an important victory in the appeals court on December 29, 1965. The case drew attention nationwide and the image of the mountain graced the pages of such magazines as *Life Magazine*. The fight between Scenic Hudson and Con Ed continued until 1980, when the power company abandoned the project and donated the Storm King property to the Palisades and town of Cornwall as parkland.

The Storm King case was a turning point in United States environmental history for several reasons. It created a precedent by which a citizens' organization could sue a government agency in court. It led to the passage of the National Environmental Policy Act, which requires an environmental review of all federally-approved projects. When Congress passed the Clean Water Act in 1972 and committed the federal government to clean up polluted waters, the citizen's suit provision modeled upon Scenic Hudson's Storm King suit allowed citizen groups to sue polluters under the Act. The Clearwater organization filed the first suit under the Clean Water Act, against the Tuck Tape Company of Beacon, N.Y., which had been dumping titanium dioxide and solvents into Fishkill Creek, a tributary of the Hudson.

Those opposed to the development of Storm King Mountain turned to the paintings of the Hudson River School artists as a profound reason to preserve the landscape of the Hudson Highlands. In 1972, the Scenic Hudson published *The Hudson River and Its Painters*, which aimed to re-introduce Americans to the masterworks of the Hudson River School and raise money and awareness for the area's preservation. Art historian Vincent Scully eloquently testified before the FPC in 1966, demanding that the mountain be left alone:

It is not picturesque in the softer sense of the word, but awesome, a primitive embodiment of the energies of the earth. It makes the character of a wild nature physically visible in monumental form. As such it strongly reminds me of some of the natural formations which mark sacred sites in Greece and signal the presences of the Gods; it preserves and embodies the most savage and untrammelled characteristics of the wild at the very threshold of New York.

Scully exalted Storm King in words, just as Samuel Colman had done with pigment and canvas exactly one century earlier when he created *Storm King on the Hudson*.

Glossary

gun carriages: wheeled devices that carried heavy iron cannons to and from the battlefields.

New Amsterdam: the 17th century Dutch settlement at the southern-most tip of the island of Manhattan in current-day New York City.

Parrott cannon: (also known as the Parrott rifled gun) Invented in 1860 by Captain Robert Parrott, a front-loading artillery weapon. Parrott perfected the weapon by reinforcing the breech (rear-end) of the cast iron tube with an iron band. The term “rifle” refers to the grooves inside the barrel of the cannon, which imparted a spin to the projectile. The cannon was later patented in 1861.

Robert Parrott: (1804-1877) American soldier and inventor of military artillery. Best known for the eponymous Parrott cannon. After resigning his commission from the military, he became superintendent of the West Point Foundry Ironworks in Cold Spring, New York, where he invented the eponymous Parrott cannon.