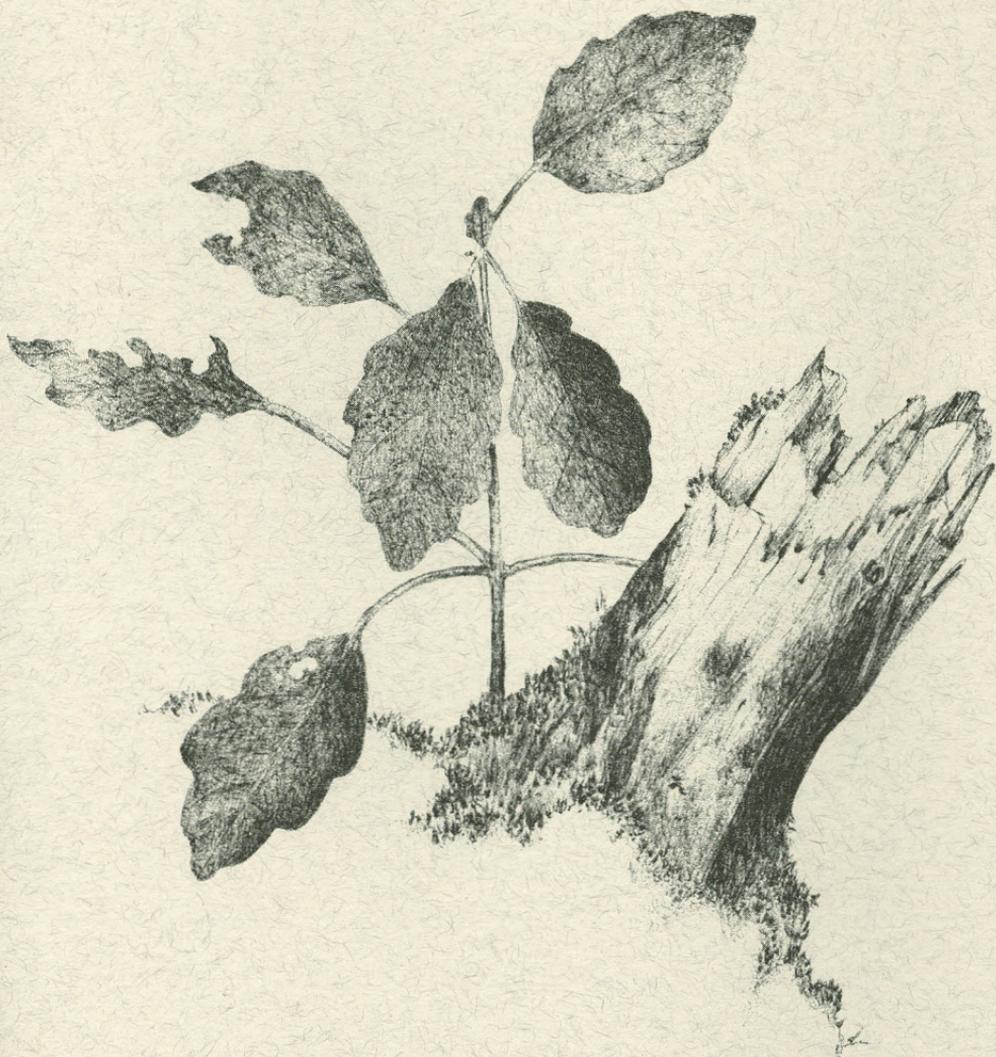


RAVINE TRAIL



Saint-Gaudens National Historic Site

New Hampshire

Welcome to the Ravine Trail.

A 300 meter (1/4 mile) walk will take you along an old cart path which was often visited by Augustus Saint-Gaudens.

The sculptor loved this area, not only for his fine home and gardens, but for its natural setting so far from the cares of the city. It is hoped that this short trail will help you to better understand the forces which have shaped this landscape.

Allow about 30 minutes for a stroll through the Ravine. Some portions of the trail are steep and walking shoes are recommended. Note that the water of Blow-Me-Up Brook is *not* fit for drinking. Take your time to enjoy the natural features and have a safe visit.

As in all areas of the National Park System, the animals and plants are fully protected. Please leave them in place for those who come after you.

One plant which you will want to avoid is Poison Ivy. A good rule here in the woods and throughout the Site is: "Leaves of three, let it be."

Poison Ivy
(*Rhus radicans*)



STOP 1 TO BEGIN. . .

Like a solidly built house, the land must have a foundation: the bedrock and the soil. These have a history all their own which can only be uncovered by clever 'detective' work by geologists — scientists who study the Earth.

Geologists have pieced together the story of New England's distant past. The story begins with forces which folded the earth's crust to form mountains and hills. These highlands were then worn away by rain, streams, and Ice Age glaciers.

The sandy soil on which you stand was deposited on the edge of an ancient lake formed by melting of these glaciers. Later, a small brook eroded this soil to form the Ravine which you see before you.

While changes in the face of the earth take place very slowly, plants and animals come and go quickly. Today's New England climate allows the growth of a large number of plants which together form the *Northern Hardwoods* community.

As you continue along this historic cart path, this guide will introduce you to some of these plants and their place in the scheme of things. You will also find hints on where to see the more secretive animals that live here.

And so, into the Ravine.

STOP 2 DECAY AND RENEWAL

When the trail was cleared only a section of this log was cut and moved aside. Other large logs and stumps are scattered along the trail—all results of logging before 1964. Why aren't these logs removed?



Horn Lichen
(*Cladonia coniocraea*)

Some might say that a dead log is ugly, but without this forest litter the living trees could not survive. This log contains valuable nutrients which, through the slow process of decay, will be returned to the soil and eventually to other trees.

Look closely at the tiny plants on this log. The horn lichen is, in fact, a partnership of two primitive plants. An *algae* produces food and gives the plant its green color, while a *fungi* provides the leafy form. Perhaps you can find other fungi on the log—they come in a variety of colors and shapes (mushrooms for example).

Mosses also grow here, like a soft green carpet on the rotting wood. These plants are another part of the cycle of decay and renewal.

If you examine the log you may see the creatures which live in this miniature world. Carpenter ants, spiders, mites, and slugs all owe their lives to this decaying log.

At the next stop you will step higher in the plant world.

STOP 3 FERN GARDENS

Look down the bank at the luxuriant growth of ferns along the brook. The ferns are an ancient line in the plant world. At one time the eastern United States was covered with forests of tree-sized ferns. It is the remains of these ferns, buried and compressed into rock, which we now use as a major source of energy: coal.

Consider some uses of ferns today: woods-wise people gather young ferns (fiddleheads) for a spring-time meal, and potted ferns are once again popular house plants. Ferns reproduce by spores rather than seeds and so have no flowers. But their variety of delicate shapes are a part of the forest mood. Compare these fern gardens planted by nature with gardens planted by man.

There are many kinds of ferns in the Ravine. Their names all please the imagination: Ostrich, Cinnamon, Maidenhair, Interrupted, and Sensitive.

Perhaps the most easily recognized fern is the Christmas Fern. It has dark, evergreen fronds (leaves) which grow in neat little circles. They add a touch of color to the woods, even in the dead of winter. You can identify this fern by the shape of its leaflets: they look like small christmas stockings.



Christmas Fern
(*Polystichum acrostichoides*)

Ferns grow best in wet places; watch for them as the trail winds along the brook.

STOP 4 BLOW-ME-UP BROOK

When the sophisticated New Yorkers of the Art Colony first came to Cornish, they were amused by the quaint ways of the local people. In turn, the natives tended to be suspicious of their new neighbors.

The summer folk laughed particularly hard at the name of the stream which flows through the western section of the town. It was named Blomidon by the first settlers, but the name quickly changed to Blow-Me-Down. So, the artists decided that this small branch of the stream would be called Blow-Me-Up.

The name stuck—and, just maybe, it is appropriate.

Look behind you at the steep wall of the Ravine and imagine the amount of soil and rock this brook has removed. Then, look at the stream bed, clogged with logs, branches, and large boulders. This peaceful little brook can do a great deal of work, tearing down and shaping the land. It's a powerful little dynamo, well worth the explosive name of Blow-Me-Up.

Look into the waters of the brook for water-striders and beetles. These insects actually walk on the thin surface layer of water. Look also for young mosquitoes as you shake an adult away from your arm—and for the fish which feed on these young insects.

Watch your step on the trail ahead.

STOP 5 HEMLOCK TREES

Have you noticed the dark, evergreen trees which are so common in the Ravine? The lacy foliage of the Eastern Hemlock can be seen almost everywhere.

Eastern Hemlock
(*Tsuga canadensis*)



Find a low hemlock branch and study its needles. Notice how flat they are and that the underside of each one has two silvery lines. Look more closely and see the woody cushion at the base of each needle. It is features like these which help you to identify the cone-bearing or *coniferous* trees. Look for small, rounded hemlock cones on the ground.

Taller trees in the Ravine are surrounded by hundreds of seedling hemlocks. These survive in the shade. When an opening is formed in the forest canopy they are ready to take the advantage and quickly fill the gap.

On hot summer days, the cool shade of the hemlock forest is home to chipmunks and red squirrels. In winter, the grove becomes a haven for white-tailed deer seeking protection from chilling storms.

Move to Stop 6 to see another conifer—but keep your eyes open. In the woods the program never follows a guide book.

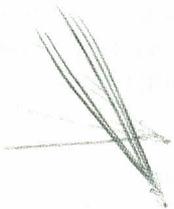
STOP 6 WHITE PINE

The first thing you will notice about the Eastern White Pine is its size. Commonly growing over 100 feet, some giants have been measured at 220 feet.

The White Pine played an important part in the early history of New Hampshire. English shipbuilders needed these tall trees to make masts for the great sailing vessels of the day. Scouts were sent out into the wilderness to carve the King's Seal onto the bark of the largest trees. These were reserved for the Royal Navy and stiff penalties were imposed on anyone who cut a King's pine.

The White Pine also plays an important role in forest succession. This tree springs up quickly in old fields, helping to bring forests back to the land. The slope of Dingleton Hill, where today's entrance road winds through a stand of tall pines, was an open pasture in Saint-Gaudens' day.

The needles of the White Pine come in bundles of five. Search for these long, flexible needles here. Then, as you leave the Site, examine the needles of the trees which Saint-Gaudens used in the hedges around his home. Although the trees have been clipped to the shape man desires, the needles will tell you their names.



Eastern White Pine
(*Pinus strobus*)

STOP 7 THE HARDWOODS

Lift up your head and look for the sky. Hopefully, it is blue and filled with sunshine. If it is raining, remember that it is the rain which provides the greenery that is a New England trademark.

Most of the trees in this area have broad leaves which fall off in autumn. They are hardwoods or *deciduous* trees. If you are lucky enough to be here in October, you will see the annual display of colors. The reds of maples, yellows of the beech, and russet tones of the oak are a forest celebration.

Along the brook you can see a Yellow Birch, a tree which competes with hemlock for the best growing sites. This water-loving tree is known by the metallic bark that peels off in thin strips, making the tree look as if it were wrapped in gold foil. The bark and young twigs give us Oil of Wintergreen, a linament used by old-timers to relieve an aching back.

A canopy of Staghorn Sumac arches over the trail. There are many leaflets on each twig of this tree, but it is best identified by the clusters of deep red fruits which decorate the branches in the fall.

As you walk, look for a scattered pile of feathers along the trail. This may be evidence of a fox and his last meal. If you see the crafty fox you are one of the lucky few!

A short side trip will take you to Stop 8.

STOP 8 BEDROCK AND THE DAM

Here again you can see the power of a small stream. The brook has cut down into the bedrock, exposing phyllites and slates. Both of these rocks were once layers of ooze on the floor of an ancient sea. Heat and pressure changed the mud to stone which was then folded and compressed again during the uplift of the Appalachian Mountains.

Although Blow-Me-Up Brook flows freely in the Ravine, man has made changes in the scene. Just downstream you can see a restored fieldstone dam which holds back a pool of clear, cold water. Saint-Gaudens and his assistants often came to this swimming hole to relax. You can imagine these outings to the Ravine: filled with laughter and shouts as the artists rested after their difficult work in the hot and dusty studio.

This dam had only a temporary effect on a very small stream. Man enjoyed the pool for a few years and then moved on, leaving the brook to go about its business. Today we can build much larger dams which change the natural systems of rivers like the Connecticut into which this brook flows. Scientists and lawmakers must decide whether a dam will serve man without harming nature.

You may want to rest on a log before returning to the main trail for the climb out of the Ravine. If you do, look for the Partridgeberry. It is an important food for the wildlife of these woods.

Partridgeberry
(*Mitchella repens*)



STOP 9 LISTEN. . .

There are sounds which fill the Ravine. The rushing of water, the sighing of wind in the trees, the tapping of your own feet on the trail. Here, at the edge of the woods, birds will send whistled messages to each other, warning of your approach.

It's been a steep climb out of the Ravine. When you step out of the woods, rest a while. Sit on the lawn and study patterns of the trees or of the clouds in the New Hampshire sky.

Then, when you leave, take with you a memory of this place in the natural world and of the sculptures which a gifted artist created here.

"The memory of the first lying on the grass under the trees and the first looking through the branches at the flying clouds will stay by me if I live to be as old as ten Methuselahs."

— Augustus Saint-Gaudens

The Ravine Trail is the result of a Volunteers in Parks (VIP) Program at Saint-Gaudens National Historic Site. Clearing of the trail was done by youngsters participating in the Summer Environmental Program sponsored by the Cornish Conservation Commission.

For more information on the VIP Program inquire at the Site office.

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U.S. DEPARTMENT OF THE INTERIOR
National Park Service



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