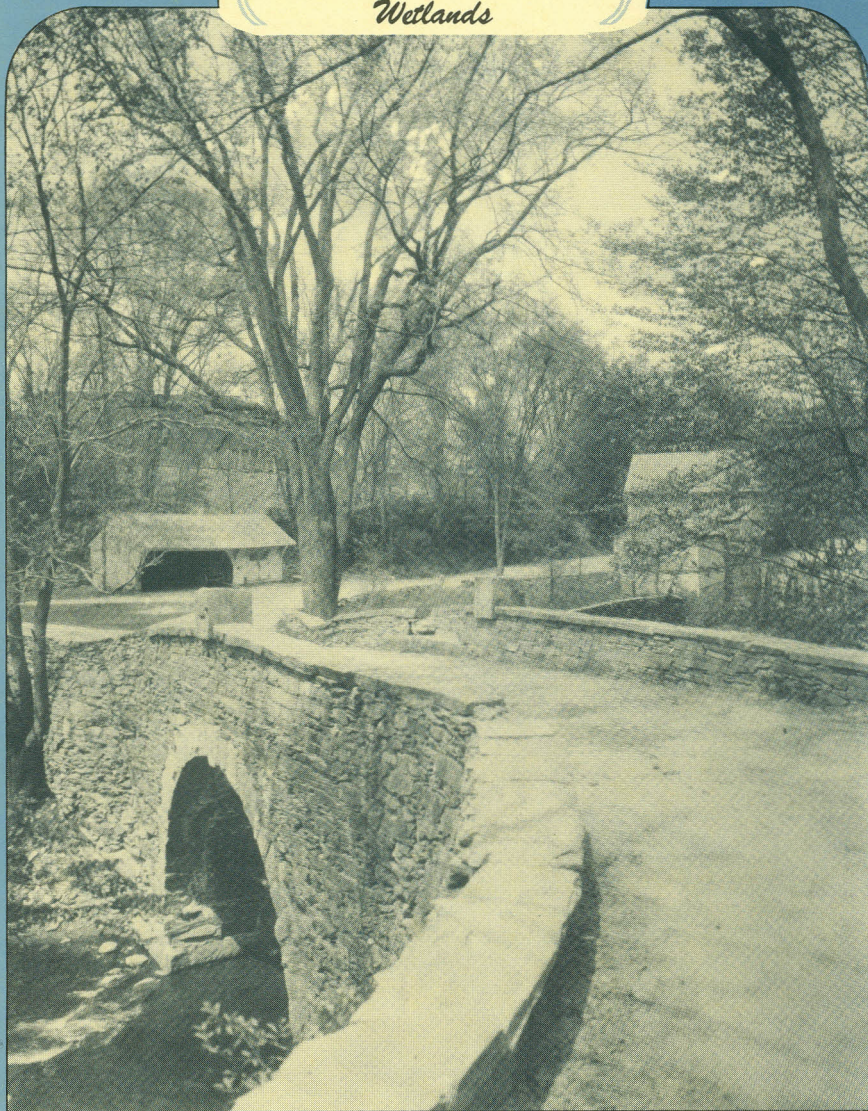


*Woodlands  
and  
Wetlands*



**A Guide To The Blow-Me-Down Natural Area**  
Saint-Gaudens National Historic Site  
New Hampshire

*"I had been a boy of the streets and sidewalks all my life. Although no one could have enjoyed the fields and woods more heartily than I, I soon tired and longed for my four walls and work. But during this first summer in the country, it dawned on me seriously how much there was outside of my little world."*

*Augustus Saint-Gaudens*

## **WOODLANDS AND WETLANDS**

### **A Guide to the Blow-Me-Down Natural Area**

*The National Park Service welcomes you to Saint-Gaudens National Historic Site and hopes you enjoy the Blow-Me-Down Natural Area.*

*Jeffrey S. Wallner, the writer*

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Photos by Jeffrey S. Nintzel



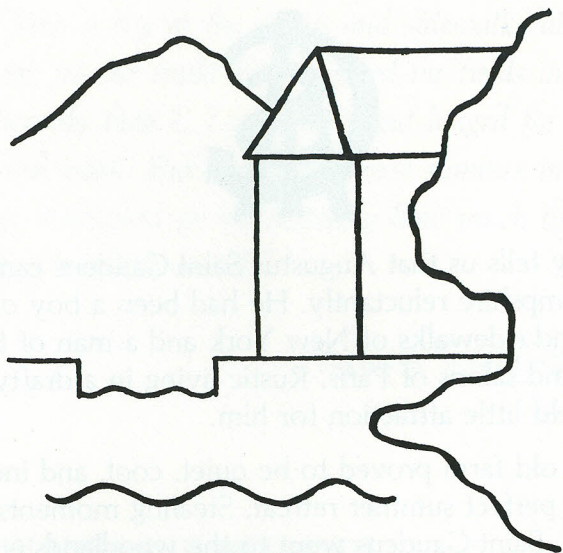
**H**istory tells us that Augustus Saint-Gaudens came to New Hampshire reluctantly. He had been a boy of the streets and sidewalks of New York and a man of the studios and salons of Paris. Rustic living in a drafty farmhouse held little attraction for him.

Still, the old farm proved to be quiet, cool, and inexpensive: the perfect summer retreat. Stealing moments from his work, Saint-Gaudens went to the woodlands and wetlands surrounding his home and sought relaxation, inspiration, and renewal of spirit. With eyes and mind open to the subtle artistry of nature, he found all of these.

Often the sculptor enjoyed active outdoor sports, like golf, swimming, and tobogganing. In the Blow-Me-Down Area he would ski down steep wagon trails covered with powder snow, or join his friends and assistants for a spirited game of ice hockey on the frozen surface of Blow-Me-Down Pond.

During the last years of his life, Saint-Gaudens was braced by the fresh air and stirring beauty of these hills. Meadows of spring wildflowers, brilliant autumn colors, sunsets over Mount Ascutney: all of these were benefits of the country life.

The spirit of the sculptor's masterpieces lives on in the woodlands and wetlands of the Blow-Me-Down Natural Area.



**T**he Blow-Me-Down Natural Area is a recent addition to Saint-Gaudens National Historic Site. More than 80 wooded acres are now protected by the National Park Service. Included are Blow-Me-Down Pond and the valuable wetlands surrounding it, as well as the historic grist mill, dam, and stone bridge.

In order to make this area accessible to visitors, the Park Service has cleared a series of old cart paths to form the trail to Blow-Me-Down Pond. This trail, along with its side paths, is nearly two miles long and has been designed for an afternoon of leisurely hiking.

The trail is marked by signs like the one pictured above. Follow these signs to discover a whole series of unique and little-known natural and historic features. This guide and the map (at the end) will help you explore and understand the resources of the Blow-Me-Down Natural Area and the entire national historic site.

**T**he landscape of New England has changed dramatically over the ages. Bedrock found in the Blow-Me-Down Area is a phyllite of the Gile Mountain Formation. The rock first formed as a muddy sediment on the floor of the Ordovician Sea, 450 million years ago. The twisted foliation, or layering of the rock testifies to the forces of heat and pressure which transformed mud to stone.

The creation of the Appalachian Mountains and foothills of New Hampshire was a gradual process. First, land emerged from the sea, then was folded and upthrust in a period of mountain building (an *orogeny*) which ended 180 million years ago.

Since then erosion has been the principal sculptor of this landscape. The most prominent erosional feature visible from the Site is Mount Ascutney, a fine example of a monadnock; for, the syenite rock, which forms the mountain, is highly resistant to the powers of erosion: wind, rain, and ice.



Foliation in the Gile Mountain phyllite.

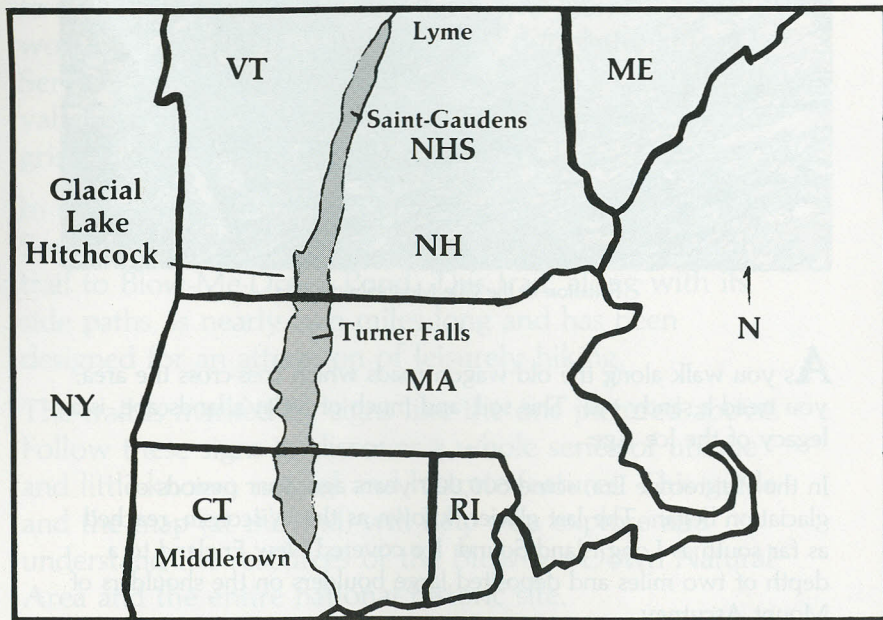
**A**s you walk along the old wagon roads which criss-cross the area, you tread a sandy soil. This soil, and much of today's landscape, is a legacy of the Ice Age.

In the Pleistocene Era, some 600,000 years ago, four periods of glaciation began. The last glacier, known as the Wisconsin, reached as far south as Long Island Sound. Ice covered New England to a depth of two miles and deposited large boulders on the shoulders of Mount Ascutney.

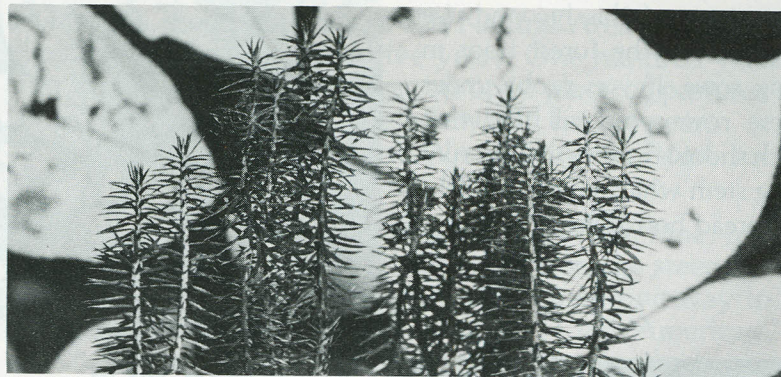
Moving over the countryside, the glacier acted as a bulldozer, piling up enormous mounds of earth, called moraines. One of these moraines stretched across the Connecticut River Valley at Middletown, Connecticut. Water backed up behind this natural dam to form 157-mile long Lake Hitchcock. Were you to stand on the porch of Saint-Gaudens' home some 13,000 years ago, you would have been covered by 120 feet of icy water!

The sandy soil of the Natural Area is composed of glacial outwash, transported by raging streams of meltwater from the glaciers and deposited as a delta on the edge of Lake Hitchcock by an ancestor of Blow-Me-Up Brook.

In time the moraine dam in Connecticut broke, but the water was backed up by a second moraine at Turners Falls, Massachusetts, to create Lake Upham. This lake was drained about 10,000 years ago, allowing the Connecticut River to flow freely through its valley. The most recent evidence of erosion in the Natural Area is a series of terraces which mark the old banks of the meandering River.



## LYCOPODS: the Ground Forest



Walking through the woodlands, we can easily overlook some of the most intriguing plants and animals. Often you are not only walking through a forest, you are also walking *over* one.

The sprawling beds of evergreen plants scattered across the forest floor in the Natural Area are *lycopods* or *clubmosses*. Although they look like seedling pines, these plants are more closely related to the ferns. The lycopods, like the ferns, trace their ancestry back 300 million years to the spore-bearing forests of the Coal Age.

Spores of lycopods take to the air in the fall and cover the shoes of walkers in the Natural Area. Early photographers used this "Lycopod Powder" to take flash pictures, since the spores burn with a bright and sudden flame. Later, pharmacists discovered that the fine powder was useful as a coating for pills, making them easier to swallow.

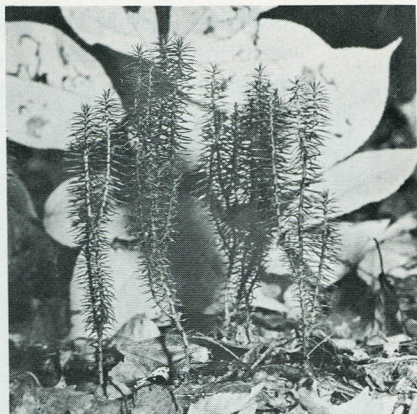
Another common use of lycopods was as Christmas decorations. The evergreen stems can be easily woven into long-lasting and attractive wreaths. This was such a popular use that lycopods began to disappear in some areas: an indication that man can have an impact on nature even in the most innocent of his activities.

On the next page, three types of lycopods are pictured and described. To see them at their best you must get down on your hands and knees to enter their world. If you stop along the path and make their acquaintance, you will be surprised to find a thriving community of plants and animals in a miniature forest under your feet.

## BRISTLY CLUBMOSS

(*Lycopodium annotinum*)

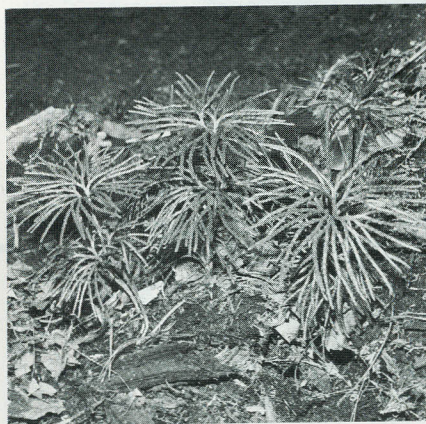
The stems of this lycopod rise singly from the forest floor in long rows. If you probe under these rows you will find that each shoot is connected to a running stem which helps the plant to spread horizontally.



## RUNNING PINE

(*Lycopodium complanatum*)

The Running Pine, as its name implies, also spreads by underground stems. But notice that the leaves are cedar-like and the growth form is more irregular. The sandy soils of the Natural Area are the preferred environment of this plant.



## TREE CLUBMOSS

(*Lycopodium obscurum*)

Well-named, this lycopod is easily mistaken for a young pine tree. The underground runner is so deep that it is not obvious that the evergreen stems, sprouting here and there on the forest floor, are actually branches of one plant.

## Woodlands . . .

Although the woodlands of the Natural Area look old, they are still in their formative years. One hundred years ago the Town of Cornish was an open place of pastures and meadows. Woodlots were few and far between. Farmers hauled hay along the Wentworth Hill Road, today a narrow path through the forest.

The first tree to reclaim old fields is the White Pine. In the Natural Area white pines grow best on the steep slopes of ravines. On more level sites, pines give way to a dense canopy of hardwood trees. Red Oak, American Beech, Sugar Maple, and Paper Birch grow on the terrace-lands. If these trees were to fall to axe or fire, the cycle of forest renewal would begin again.

The dynamic process which changes field to forest is known as forest succession. Succession can be as subtle as a dandelion growing in a crack in a sidewalk, or as obvious as millions of trees growing on New Hampshire's hills. Today the state is 85% forested, practically the reverse of a century ago.

### THE TRAIL OF THE SYCAMORES

A side path from the Trail to Blow-Me-Down Pond leads to the banks of the Brook that was named "Blomidon" by an early surveyor. On the opposite bank of the brook is a grove of the unusual Sycamore tree.

Known by its maple-like leaf and scaly, peeling bark, the Sycamore is growing at the northern edge of its range here on Blow-Me-Down Brook.

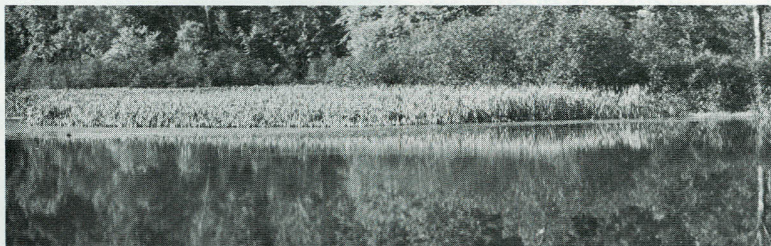
Nearby once stood a carding and fulling mill owned by Walter Mercer, a Scotsman who came to Cornish in the 1830's. His mill processed the wool of sheep, grazed in neighboring meadows.



## ...and Wetlands

The value of wetlands as wildlife habitat has become evident to the public in recent years. Too often marshes and ponds have been drained or filled to suit man's needs, without considering the consequences. Here the opposite has happened: man created the wetlands, and nature tries to destroy them.

Once, Blow-Me-Down Pond was a river-bank forest, flooded in spring and dry in the autumn. A community of plants and animals tuned to these changes flourished here. Red Maple and Sycamore arched over a stream where bobcat and mink paused to drink.



Then man built a dam on the Brook, flooding the forest and creating a lake where deepwater fish and wood ducks swam among water weeds and pond lilies.

In 1938, nature destroyed the pond when a hurricane washed the dam downstream. The remaining unsightly mudflats prompted local residents to rebuild the dam. Later, a modern highway covered the western portion of the pond. Even today sediments carried by Blow-Me-Down Brook are slowly changing open water to marshland.

Responding to these changes, another community has taken up residence. Cattails and yellow iris grow on marshy banks where muskrat and heron hide. Black ducks nest along the shore and beavers prowl the deeper waters near their lodge. The future of this community is in the hands of man and nature — for the wetlands could become woodlands again.

## A BENCH AT BLOW-ME-DOWN POND

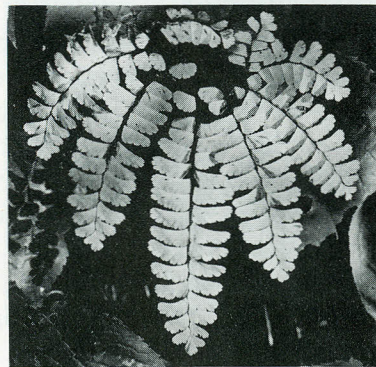
Vistas such as this were common in the days of the Cornish Art Colony. An artist passing this way might have found inspiration in the view. But the pond had practical uses as well.

Originally, Blow-Me-Down Pond supplied a head of water to power the turbine at the Grist Mill on its shore. In January, pond ice was cut and stored in the ice-houses of the Colony to provide cool drinks on summer afternoons. Recreational activities like ice-skating and swimming were enjoyed here as well.

Today's visitor can hike, fish, or picnic at the pond; and inspiration is still readily available at this bench. Here you may watch the antics of a beaver, listen for the rattle of a kingfisher, or enjoy the afternoon sun.

## FERNS

No one who walks in the woods can ignore the ferns that sprout along — and often *in* — the path. Many of us would like to learn the names and characteristics which make ferns unique. With the help of the following pictures and descriptions you can make your own discoveries of the ferns which grow so luxuriantly in the moist areas around Blow-Me-Down Pond.



### MAIDENHAIR FERN (*Adiantum pedatum*)

This fern grows in dense, tangled masses that hang down steep banks and cliffs like waves of hair. One of our most beautiful and unusual ferns, it is common along the banks of Blow-Me-Down Brook below the dam.

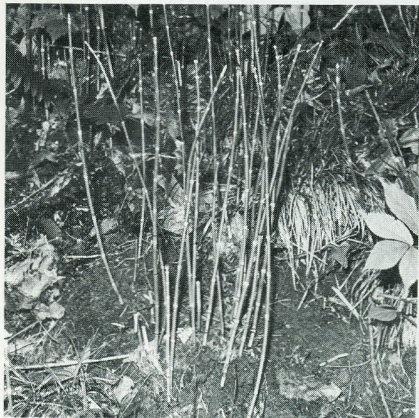


### SENSITIVE FERN (*Onoclea sensibilis*)

Why sensitive? Because at the first touch of frost these stocky, green ferns turn brittle and brown. Their spore-bearing leaves give them another name: "Bead Fern." Look for it on the drier shores of the Pond.

### OSTRICH FERN (*Matteuccia struthiopteris*)

The graceful, plume-like fronds of this fern look like long ostrich feathers. The fronds can grow to be five feet tall, sometimes giving forest glades a jungle-like appearance. Ostrich Fern grows everywhere in the Natural Area.



### ROUGH HORSETAIL (*Equisetum hiemale*)

Closely related to the ferns, but not at all fern-like, are the horsetails. This prehistoric looking plant is common above the pond where streams emerge from deep ravines. The silica-rich stems were once used to clean pots and pans, resulting in the common name of "Scouring Rush."

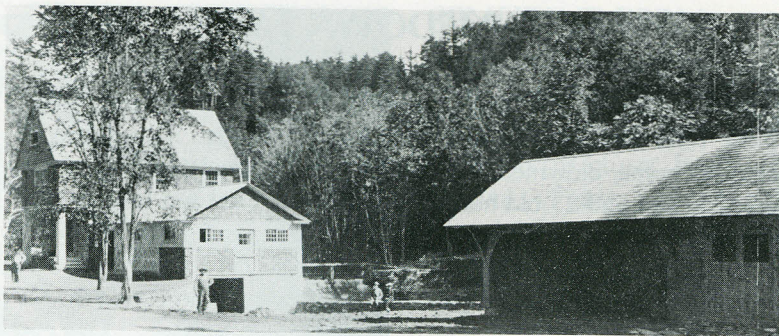
## BLOWMEDOWN FARM

In the spring of 1884, Charles Cotesworth Beaman, a prominent New York attorney and student of international law, moved into his summer home, Blowmedown. Beaman had accumulated over 1000 acres of land and 23 old houses in Cornish — land and houses that were sold to Saint-Gaudens and other artistic friends from New York. Situated on a hillside above the Connecticut River, Blowmedown Farm became the center of social life in the Cornish Art Colony.

A Cornish historian described C.C. Beaman as "one of the cheeriest men who ever drew the breath of life, bubbling over with boyish enthusiasm." The lawyer's home was a rambling structure constructed by linking three old houses into one. Nearby stood the "Casino," a recreational building where visitors enjoyed dancing, tableaux, and bowling. In 1884, an "old-fashioned barn-raising" drew a crowd of 75 people who enjoyed a feast in the farm's orchard afterward. The red cupola of the barn they raised is visible from the shore of Blow-Me-Down Pond.



Blowmedown Farm and the Pond, ca 1891



Blowmedown Mill & Blacksmith Shop, ca. 1891

**T**hree structures which were once owned by Charles Beaman are now a part of Saint-Gaudens National Historic Site: The stone bridge, dam and grist mill.

In September of 1887, Beaman signed an agreement with the Selectmen of Cornish for construction of the **Stone Bridge** over Blow-Me-Down Brook. This graceful structure, with its keystone arch, carried traffic through the valley for well of over 50 years. The bridge was partially covered during construction of today's highway, but a foot-path now utilizes the bridge again.

From the middle of the old bridge, park visitors can look upstream to the concrete **Dam** which replaces the one built for Beaman in 1890. In the days before we came to rely on oil and natural gas for our energy needs, the fall of water at the dam powered the machinery of the Blowmedown **Grist Mill**.

Designed by the New York architectural firm of McKim, Mead, and White, the Mill was built to serve the needs of Blowmedown and neighboring farms. The Mill's "Great Day Book" for February 8, 1898, gives an example of a day's work for the stone grinding wheels:

| Corn                  | Oats | Bran   | Mixed Feed | Linseed Meal |
|-----------------------|------|--------|------------|--------------|
| 500 lb                | 5 bu | 600 lb | 100 lb     | 100 lb       |
| Total of 8 customers. |      |        |            |              |

The grinding wheels stopped turning in 1928, and the Mill became a silent relic of the past.

## THE MASTLANDS

**I**n 1765, the first settlers of Cornish pushed up the Connecticut River into the hostile wilderness above Fort No. 4 at Charlestown. One of these pioneers, Alice Chase, recalled "a trip up a rapid stream in an Indian canoe to a little opening among the towering trees."

The "towering trees" were White Pines that grew in dense groves, called the Mastlands, along the river. Colonial loggers marked and cut the finest of the pines for use as masts on the vessels of the Royal British Navy. Logs were hauled onto River ice in the Winter, then driven to the coast with the spring floods.

When he granted the Town of Cornish a charter for settlement, the Colonial Governor Benning Wentworth recognized the value of the Mastlands. He reserved an area of 500 acres on the slopes of Governor's Mountain for his own use.



The Return Trail from Blow-Me-Down Pond winds through this grant, on what is now called Dingleton Hill.

Change is the only constant in these woodlands. The great pines of colonial times were cut two centuries ago, and today pines tower over the slopes again. A walk through the pines can put you in touch with the spirit of wilderness, or with the genteel days of the Cornish Colony.

The Blow-Me-Down Natural Area is a place of the future too. With your help these Woodlands and Wetlands will serve as a lasting setting for the home of one of America's greatest artists — Augustus Saint-Gaudens.



## COMMON BIRDS of Saint-Gaudens National Historic Site

Bird-watching was a popular sport in the Cornish Art Colony. If you'd like to try your hand at it, the Natural Area offers an excellent location. Habitats of the birds are identified as: Wd - Woodland; Wt - Wetland; L - Lawns, Gardens, and Fields.

- |                                   |                                  |
|-----------------------------------|----------------------------------|
| ___ Black Duck (Wt)               | ___ Hermit Thrush (Wd)           |
| ___ Great Blue Heron (Wt)         | ___ Veery (Wd)                   |
| ___ Green Heron (Wt)              | ___ Ovenbird (Wd)                |
| ___ Turkey Vulture (Wd)           | ___ Red-eyed Vireo (Wd, L)       |
| ___ Broad-winged Hawk (Wd)        | ___ Starling (L)                 |
| ___ Pileated Woodpecker (Wd)      | ___ Blue Jay (Wd, L)             |
| ___ Hairy Woodpecker (Wd)         | ___ Common Grackle (L)           |
| ___ Common Flicker (L)            | ___ Red-wing Blackbird (Wt)      |
| ___ Belted Kingfisher (Wt)        | ___ Common Crow (L)              |
| ___ Ruby-throated Hummingbird (L) | ___ White-breasted Nuthatch (Wd) |
| ___ Chimney Swift (L)             | ___ Black-capped Chickadee (Wd)  |
| ___ Barn Swallow (Wt, L)          | ___ Scarlet Tanager (Wd)         |
| ___ Tree Swallow (Wt)             | ___ American Goldfinch (L)       |
| ___ Eastern Kingbird (L)          | ___ Purple Finch (L)             |
| ___ Eastern Phoebe (L)            | ___ Cardinal (Wd, L)             |
| ___ Catbird (Wd, L)               | ___ Chipping Sparrow (L)         |
| ___ American Robin (L)            | ___ Song Sparrow (L)             |

## TREES

### ACERACEAE

- \_\_\_ Striped Maple
- \_\_\_ Red Maple
- \_\_\_ Sugar Maple
- \_\_\_ Mountain Maple

### BETULACEAE

- \_\_\_ Swamp Alder
- \_\_\_ Yellow Birch
- \_\_\_ Black Birch
- \_\_\_ White Birch
- \_\_\_ Gray Birch

### FAGACEAE

- \_\_\_ American Beach
- \_\_\_ White Oak
- \_\_\_ Red Oak

### HAMAMELIDACEAE

- \_\_\_ Witch Hazel

### JUGLANDACEAE

- \_\_\_ Bitternut Hickory
- \_\_\_ Butternut

### OLEACEAE

- \_\_\_ White Ash
- \_\_\_ Black Ash

### PINACEAE

- \_\_\_ White Pine
- \_\_\_ Eastern Hemlock

### PLATANACEAE

- \_\_\_ American Sycamore

### TILIACEAE

- \_\_\_ American Basswood

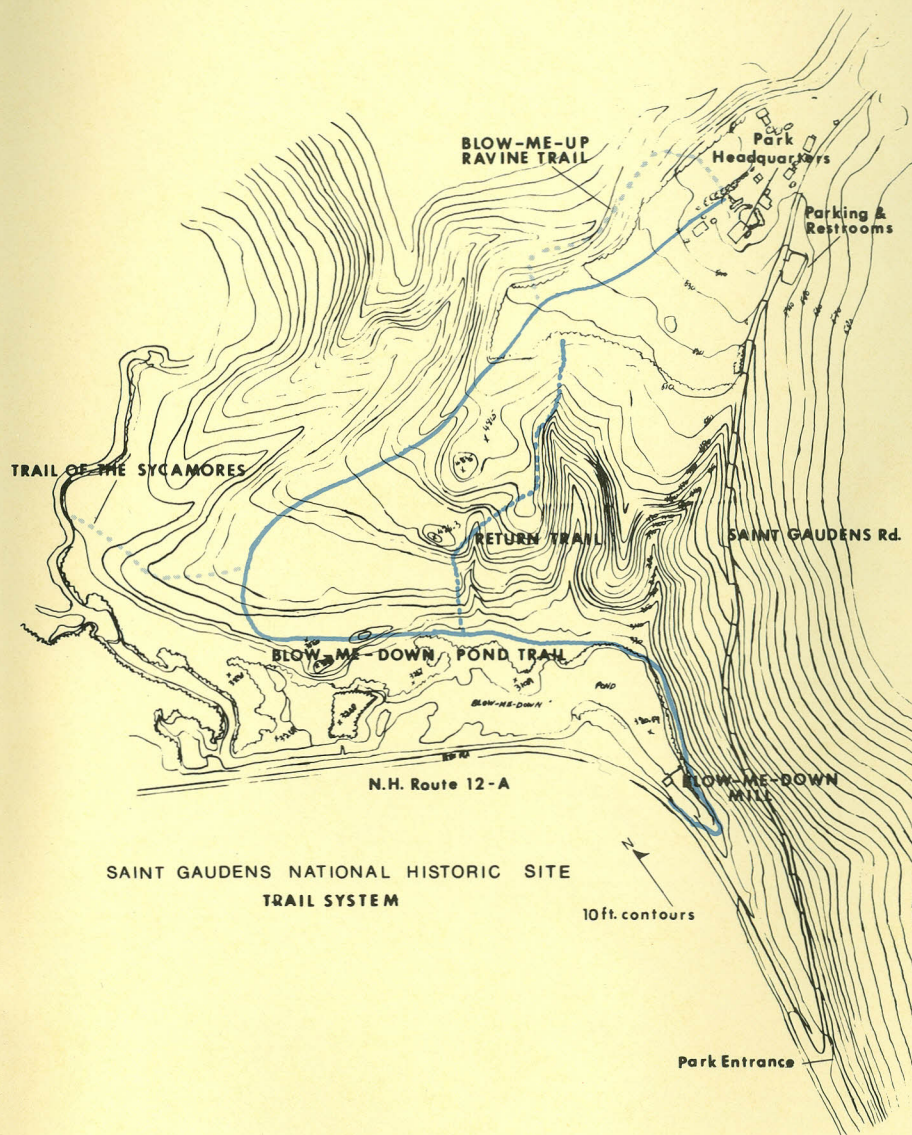
### ULMACEAE

- \_\_\_ American Elm
- \_\_\_ Slippery Elm

## FERNS AND FERN ALLIES

(not mentioned in the text)

- \_\_\_ Dwarf Scouring-Rush
- \_\_\_ Staghorn Clubmoss
- \_\_\_ Cut-Leaved Fern
- \_\_\_ Rattlesnake Fern
- \_\_\_ Cinnamon Fern
- \_\_\_ Interrupted Fern
- \_\_\_ Royal Fern
- \_\_\_ New York Fern
- \_\_\_ Northern Beech Fern
- \_\_\_ Lady Fern
- \_\_\_ Marginal Shield Fern
- \_\_\_ Spinulose Wood-Fern
- \_\_\_ Hay-Scented Fern
- \_\_\_ Oak Fern
- \_\_\_ Common Polypody
- \_\_\_ Christmas Fern
- \_\_\_ Pasture-Brake



Saint-Gaudens National Historic Site, located in Cornish, New Hampshire, was authorized by an Act of Congress in 1964. The 149-acre Site included the home, studio, and gardens of noted sculptor Augustus Saint-Gaudens (1848-1907.) The Site is a unit of the National Park System.



**1981 National Park Service  
U.S. DEPARTMENT OF THE INTERIOR**

As the nation's principal conservation agency, the Department of the Interior has basic responsibilities to protect and conserve our land and water, mineral and wildlife, park and recreation, historical and cultural resources for wise use — now and in the future.

*Cover: Blow-Me-Down Stone Bridge, ca. 1920 after a hand-tinted photograph by Wallace Nutting. Reprinted by permission; Collection of Martha Davis.*