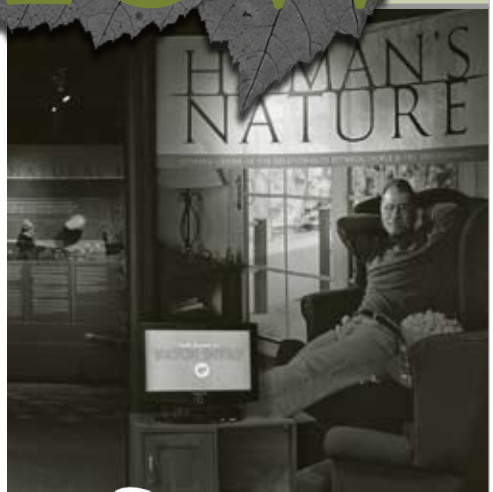
News from the
CONNECTICUT STATE MUSEUM OF NATURAL HISTORY
& CONNECTICUT ARCHAEOLOGY CENTER
University of Connecticut • Summer 2007

EXHIBITING THE Long View



More than two hundred guests came to the Connecticut State Museum of Natural History to get a first look at the Museum's new permanent exhibit, *Human's Nature: Looking Closer at the Relationships between People and the Environment* and to celebrate the Museum's recent expansion with a reopening event together with the new Connecticut Archaeology Center on April 29th. Members, friends and the University community were excited to see the new exhibit, meet Museum staff, visit with Connecticut State Archaeologist Nicholas Bellantoni, learn about volunteer opportunities and new programs, and, of course, enjoy UConn Dairy Bar Ice Cream. The new permanent exhibit explores how the natural history of Southern New England has shaped the lives of the people who live here – and how people have, in turn, shaped the environment.

"The Human's Nature exhibit is interdisciplinary, and introduces visitors to a group of fascinating scholars and their work here in New England," says Leanne Kennedy Harty, director of the Museum. The exhibit is composed of four different story-stations that look closer at the complex connections between the environment and the people of Southern New England over time. "We know that the ways people live and work are reflected throughout history in the changing landscape and environment," she says. "At the same time, human lives have continually been influenced by the region's climate, geology, hydrology, and

IN THIS ISSUE

plant and animal life. Taking the long view on natural processes and the dynamic relationship between nature and human activity can give us important insights relevant to our lives today."

Museum exhibits planner Collin Harty weaves together original video, historic images and documents, artifacts, and biological specimens to help reveal what scientific and historical research explains about the changing landscape in this region.

Robert Thorson, professor of geology, contributed to The Natural History of Work component of the exhibit and helps visitors explore the far-reaching impact Connecticut's geology has had on the state's history and its people.

TAKING THE LONG VIEW ON THE DYNAMIC RELATIONSHIP BETWEEN NATURE AND HUMAN ACTIVITY CAN GIVE US IMPORTANT INSIGHTS RELEVANT TO OUR LIVES TODAY.

State Historian Walter Woodward, an assistant professor of history, is featured in the Natural History of Comfort component. He explores the role that climate and natural resources have played in peoples daily lives.

David Wagner, associate professor of ecology and evolutionary biology and co-director of the Center for Conservation and Biodiversity at UConn, helps explore The Natural History of Shopping, and how biodiversity and the evolutionary and adaptive strategies of animals have had an enormous impact on the products people buy.

Melissa Tantaquidgeon Zobel, executive director for cultural and community programs for the Mohegan Tribe, joins visitors to discuss The Natural History of Health. She provides an introduction to the life of Mohegan Medicine Woman Gladys Tantaquidgeon, exploring intimate connections between the natural environment and human health.

Throughout the exhibit, Connecticut State Archaeologist Nicholas Bellantoni helps visitors explore archaeological perspectives on these topics. He also serves as the exhibit's primary narrator.

Along with the new exhibit, the Museum's fully renovated second floor includes two classrooms for multidisciplinary educational programs. "For the first time ever, the Museum will be running classes and workshops in its own building," says Cheri Collins, the Museum's programs and collections manager. Field learning activities, labs and workshops, guest lecturers, and camps are some examples of the Museum's programs for children and adults.

After years of moving to various locations on the Storrs campus, in 2000 the Museum was approved to relocate to its permanent building on Hillside Road. The building, constructed in 1923, is still remembered by some as the "Apple Sales Room," as it was used for apple storage and sales when orchards occupied the land

on the hill above. Last summer, the second phase of construction began as the result of a successful funding partnership between the Museum's private donors and the 21st Century UConn program, with each accounting for about half of the million-dollar project budget. The museum raised additional funds for the new permanent exhibit, *Human's Nature*.

"The expansion of the Connecticut State Museum of Natural History and its new exhibits will help people of all ages improve their understanding of cultural and natural history," said Bill Morlock, chairman of the Museum's Board.

"With continuing support from members, and its connection to the University, the Museum and Archaeology Center will continue to grow," said Bellantoni, "not only as an exceptional museum but as an important resource for the citizens of Connecticut and for students and faculty at UConn."

The Museum is now open Tuesday through Saturday, 10 a.m. - 4 p.m.

FROM THE

DIRECTOR

Dear Friends,

In this newsletter we celebrate our expansion and the recent opening of the Museum's new 2nd floor exhibit and classroom spaces. These improvements are a direct reflection of the work we have set out to do as an organization—to use the disciplines of natural and cultural history to explore changing relationships between people and the environment over time. By looking back we believe we are able to better understand our lives today. I think the core of all such efforts was captured beautifully by Franklin D. Roosevelt at the dedication of his presidential library over sixty-five years ago, when he described the work of such an institution as an act of faith by the nation in three things:

"It must believe in the past.
It must believe in the future.
It must, above all, believe in the capacity of its own people so to learn from the past that they can gain in judgment in creating their own future."

We are part of a broad and important academic mission at UConn—a mission built not only on passing knowledge to future generations, but on encouraging people to apply knowledge to solve problems and think critically about the changing world they live in. Departments in the College of Liberal Arts & Sciences are on the forefront of teaching and research in the sciences and humanities, and having direct access to these resources is one of the Museum's greatest assets. By sharing academic research and scholarship with visitors, we can better explain to people of all ages not only what we know, but how we know.

Underscoring our efforts and ensuring our success is another extraordinary asset, our many dedicated members, donors and friends. Bricks and mortar did not create our new exhibit and programming space, you did. Thank you for providing financial and material resources. Thank you for participating in our programs and sharing your experiences with others. Thank you for giving your time and enthusiasm. Thank you for believing.

Leanne Harty

Leanne Harty

A SUBTLE REFLECTION OF PLACE

BY COLLIN HARTY

EXPLORING RELATIONSHIPS BETWEEN PEOPLE & THE ENVIRONMENT

In his book *Stone by Stone, The Magnificent History in New England's Stone Walls*, Robert Thorson observes about the process of building walls, "Once the stone has been lifted, person and stone become a single mechanical entity with a common center of gravity… A stone held at arm's length can be swung in gentle upward arc like a simple pendulum hung from the shoulders." And so it is that the shape of New England's stone walls are an expression of the people that made them through the basic principles of biomechanics.

Just as stone walls are a reflection of the forces that shaped them, the lives of the people in Southern New England have, in part, been shaped by the physical and biological processes at work in this region. The way we feed, shelter and clothe ourselves, our social, political and economic structures, the way we recreate, meet our spiritual and aesthetic needs, and the advancement of our technologies have all been influenced in unique and unexpected ways by our region's geology, climate, hydrology, and plant and animal life. Our lives are subtle reflections of the place in which we live.

In today's culture our technologies increasingly seem to isolate us from nature. We hunt and gather in supermarkets. The links between the products we buy and the resources needed to produce them have become abstracted by a global economy. When we pour waste down the drain, it disappears from our consciousness too. But the notion that we are isolated from nature is quickly challenged when you examine our environmental history. By looking back we can see how the quality of life we live today is inextricably linked to the dynamic relationship between our natural history and our cultural history.

This article explores one facet of this relationship -- the ways in which geology has shaped culture. Thorson wrote, "Stone walls lie at the intersection of science and history." Pick up almost any rock from one of Connecticut's stone walls and it will be a door into the region's geological past.

Granite is one of Connecticut's oldest rocks and formed when sediments from an ancient ocean that once overlaid this area some half a billion years ago, were pushed so deep underground that pressure and heat from the earth's core caused the material to melt and re-crystallize into a new form as it cooled.

Gneiss and schist are the most common rock types underlying the State. They too were formed under the influences of high temperature and pressure, but here the sediments of the earlier sea were metamorphosed by a great convergence of continents 300 million years ago. The slow motion crash pushed skyward massive north/south oriented bands of mountains, whose worn stubs we now call the Appalachians. As the continents began to pull apart to form the Atlantic basin, a rift was created down the center of the State, which is now the Connecticut Valley. Lava erupted between the diverging tectonic plates and crystallized to form basalt. In Connecticut we know it as traprock.

Over millions of years the constant effects of wind and water eroded the mountains, carrying debris down into the lowlands and out to the ocean were it formed the continental shelf. These sediments accumulated in the Connecticut Valley for hundreds of thousands of years, until, under the force of their own weight, they fused into the sedimentary rock we know as brownstone.

On any one of these pieces of granite, gneiss, schist, basalt or brownstone you might find the incised striations that are evidence of the last great geological disturbance in New England -- glaciation. As the world's climate cooled, arctic ice advanced south, until, at its peak, over a mile of ice covered parts of this region. The last ice sheet moved across the State twenty thousand years ago. Beneath the glacier, the motion of the ice plucked stones from the bedrock and carried them on a slow march south. The weight of the ice crushed rock into mud and ground stone against stone producing the striations still evident today. As the climate warmed, the ice retreated, and great torrents of melt water transported rock, sand and silt down into the river valleys. Connecticut was again ice-free by about 15,000 years ago, but it was a bleak, windy world, littered with broken, worn pieces of rock and a tightly packed, lifeless soil.

Out of this barren world rose a slow succession of plant life and animal life. First there was a community of tiny flowers and shrubs tolerant of the wind and cold, called tundra. On the tundra grazed vast herds of caribou. As the climate continued to warm, the tundra gave way to conifers — spruce and pine — and then birch, oak, maple and more. Mastodons browsed the early forests. The roots of the plants broke apart the hard glacial soil, and year after year leaf litter accumulated among the glacial stones to form a rich dark soil. Wolves, bears, deer, and birds filled out the woodland ecosystem.

Among the rocks in the wall you might locate a stained, cracked campfire stone that hints at the first people of Connecticut. The earliest archaeological evidence of Native American activity in the State goes back 10,190 years, and was produced by carbon dating a charcoal hearth unearthed along the banks of Shepaug River in Washington Depot. From the distribution and number of artifacts at the site it appeared fewer than twenty people used the camp, stayed for less than month, and never returned. This is a pattern that repeats itself in a number of Paleo-Indian sites found in Connecticut, indicating their population was small, and that they moved often because no single location could sustain them year round.

As the landscape changed, so did the tools and culture of the people. While the Paleo-Indian environment was dominated mostly by conifers, with pockets of oak and hickory, the Archaic Period saw the rise of deciduous forests, which provided much more diverse food sources. The number of archaeological sites uncovered for this time period increases dramatically, revealing a greater variety in the people's diet, and significantly larger population sizes. Like Paleo-Indians, Archaic-Indians were nomadic, but with their larger populations and more elaborate material culture their movements were within ecological territories, returning to camps on a seasonal basis.

The Woodland Period is characterized by the development of pottery, the bow and arrow, domestication of plants, and the concentration of a growing population into more permanent villages. Native Americans were experts at living comfortably on wild foods, and in combination with the realities of a short growing season in New England, did not begin practicing horticulture until very late in the Woodland period. The choice to supplement hunting and gathering techniques with agriculture may have resulted from the requirements of feeding larger populations. This is also the first time we see intensive land use techniques employed in the region, such as using fire to clear forests for villages and horticulture or to improve wildlife habitat.

By the time Europeans arrived in the New World, population pressures had long since overwhelmed the natural resources of their home continent. The Puritans brought with them a tradition of farming techniques that maximized the yield of a minimal plot of land. By the 1675 colonists had thoroughly settled the gentle coastal slope and flat, fertile Central Valley, both easily accessible by water due to Connecticut's topography. Over the next 100 years, the expanding population spread quickly into uplands, transforming the last of Connecticut's wilderness into "a world of fields and fences."

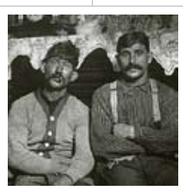
The upland farms proved very productive. Soils built from the crushed glacial debris absorbed water readily, remained moist through the driest months, and were more fertile than the sandy coastal soils. The eventual abandonment of the upland farm was not for lack of productivity, but the result of cultural and technological changes. In the early 1800s the westward expansion of railroads revolutionized agriculture, making it feasible to feed the rapidly expanding population along the eastern seaboard with Midwestern meat and produce. In a matter of decades, farming went from being primarily a local and subsistence activity to a national and international market force. New England farmers were quickly out-competed, and forced to find work elsewhere. Fortunately it proved to be just down the hill.

Early settlers commonly tapped small rivers to power village gristmills and sawmills, but not until the mid-1800s was the true potential of this resource unleashed. Rivers needed to provide two essential qualities to generate power: year-round water flow and a topographic profile that provided enough dam head to drive the water wheels. The upland's topography and rainfall levels met these criteria perfectly. In a period of decades, scores of big dams were constructed to power textile and metalworking mills in the Eastern and Western Uplands. Farmers moved down from the hilltops to fill the jobs. New immigrants streamed into the country to meet the demand for workers. Mill towns sprang up overnight where none had been before, changing patterns of population distribution in the State in ways that are still evident today. Although water was eventually replaced by coal and oil-generated steam as the engine of choice, these mills helped provide the infrastructure that fueled an American Industrial Revolution that lasted well into the 20th Century.

The rivers were also the simplest way to remove human and industrial waste from these rapidly developing urban centers. By the end of the 1800s, sanitation became a major health issue, spilling over into labor uprisings concerning worker's rights. At the peak of the Industrial Revolution, living conditions had become so bleak in many of America's cities that a new back-to-nature movement arose, as evident in the writings of Thoreau, Emerson, and artists of the Hudson River School.

Today we build our communities on the choices made by past generations. Mill towns that concentrated populations in river valleys were often built atop glacial till, which now serve as some of our most important sources of groundwater. This historical patterns of population distribution, combined with the cumulative effect of years of leaking underground tanks, road salt, and residential runoff, has tainted many community water supplies. The impact is often not just in what comes out of our taps, but also on our property values and tax rates.

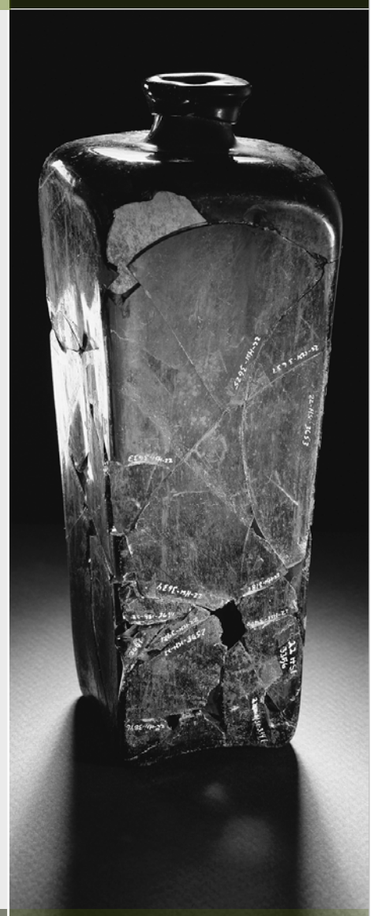
Many of the environmental problems we face today — non-point source pollution, ground water contamination, loss of biodiversity, urban sprawl, climate change, etc. — are described as quality of life problems. They are the collective result of the choices each of us makes about how to live our lives. We make these choices everyday through our actions: The type of work we do, where we choose to live, the products we buy, the types of recreation we enjoy. Collectively, these choices define our culture and come to be recorded as our history. The lesson environmental history contributes is that we are still inextricably linked to the land. When the choices we make change how natural systems function, it is we who are changed as much as nature.



2007 CT BioBlitz

The nationally recognized Connecticut State BioBlitz will take place in Middletown, Connecticut, June 9, 2007 with the Wilbert Snow School serving as the "base camp" and the hub of public activity. The City of Middletown, Wesleyan University, Neag School of Education and a growing list of community organizations have teamed up with the Connecticut State Museum of Natural History and Center for Conservation and Biodiversity at UConn to host this year's event.

The BioBlitz is a distinctive scientific endeavor. Part contest, part festival, and part educational event, it will bring together scientists from a number of universities and scientific institutions in a race against time to see how many species they can count in a 24-hour biological survey. The public will have the opportunity to observe the scientists' activities, to interact with them, and to participate in other citywide activities presented by the BioBlitz partners and a host of nature-oriented organizations.

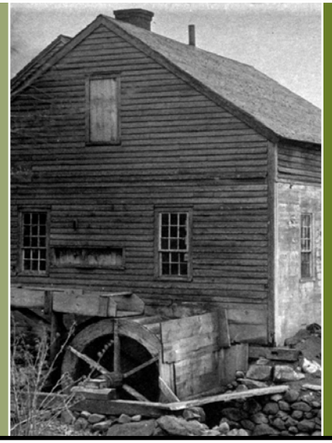


IN YOUR TOWN

Daniel's Village, Killingly, CT

The lovely town of Killingly in the Quiet Corner of Connecticut was once a dynamic and thriving center of industry. In 1836, Barber reported that Killingly "is the greatest cotton manufacturing town in the state." In addition to cotton factories, there was a woolen factory, a gin distillery, a paper-hanging manufactory, four dye houses, three clothiers' works, three carding machines, three tanneries, eight grain mills, and eight saw mills! By 1840, Killingly had the largest population in Windham county.

The site of Daniel's Village, in the northern part of Killingly, is on the National Register of Historic Places as an important manufacturing site. Its ruins include the remains of several mills, tenement houses for factory workers, a blacksmith shop, and stone mill owner's mansion. Most of the development of Daniel's Village took place after the war of 1812. By 1814, a gristmill and a cotton mill were in operation, run by the Killingly Manufacturing Company. This was a bustling and lively enterprise, in which experimental machines were piloted, power looms introduced, and new working strategies tried. In 1861, the factory burned, and the village declined. By 1915, the village was in ruins.



IN YOUR TOWN

Trowbridge Platt Mill Complex, Ashford, CT

The ruins of the Trowbridge Platt Mill Complex are tucked into the June Norcross Webster Scout Reservation in Ashford. Hidden in the woods is a late 18th or early 19th century sawmill complex with two large house foundations, a barn, outbuildings, and at least one mill building. There are multiple stone dams and stream flow modifications to Goss Brook, diverting and concentrating its flow to accommodate the workings of the mill. There is also a walled cemetery with headstones dating to the 1820s and 1830s on the site. Maps produced in 1833, 1856, and 1869 show the mill and residences of the Trowbridge, Whipple, and Platt families, who operated the sawmill complex. The main houses were probably standing into the early 20th century, but now only the foundations remain.

STATE ARCHAEOLOGIST

Ever since the Grand Reopening of the Connecticut State Museum of Natural History and Connecticut Archaeology Center, a lot of folks have approached us with sincere congratulations on the wonderful new exhibits and classroom areas. And while we are certainly proud of the accomplishments of our small but dedicated staff and the support of our many supporters, my message to everyone is that this is only the beginning!

The renovations to the second floor actually represent only the most recent phase of development, allowing us to move forward with future plans for the Museum and Archaeology Center. With continued support from donors and the University of Connecticut, the next phase of our development will include state-of-the-art collections areas for our extensive and significant anthropological and natural history specimens, a fully-equipped archaeological laboratory, a library and additional exhibit space.

Future phases of development are planned for the third floor and to the back of our building. In addition, landscaping plans for the front, side, and back of the building will include a garden, walkway, and quiet area for reflection for our student body and visitors. Planning for these new spaces has already begun.

Of course these exciting plans will not happen without your continued support. Your membership, volunteerism, participation, financial and moral support are essential in making the Museum and Archaeology Center an increasingly important destination on the UConn campus, if not the entire state. And, thanks to you, this is just the beginning!

Nick Bellantoni, State Archaeologist

IN YOUR TOWN

The Pitkin Glassworks, Manchester, CT

Captain Richard Pitkin of East Hartford had supplied the patriot army with gunpowder made in his mill on the Hockanum River during the Revolutionary War; he was rewarded for his services by being granted "sole and Exclusive right in the state to make glass of any kind for the term of twenty-five years . . ." in January of 1783. The Pitkin Glassworks at Manchester focused their efforts on the production of bottles, especially the large demijohns used for the rum trade with the West Indies. Apple cider was shipped in these bottles from Hartford, and they were returned filled with rum for sale in the United States. The wives and children of the glassworkers wove wicker coverings for these demijohns to protect them from breakage during the shipping process.

The Pitkin Glass Works made these flasks and other bottles until about 1830, when it was destroyed by a fire. The factory ruins still stand, and have been the subject of ongoing investigation by the Office of State Archaeology, UConn students, and FOSA members since 2002. Using ground penetrating radar to discover sub-surface features in addition to traditional excavation, these scientists have helped to answer questions about the processes used by the factory to produce these bottles.

MEET EMILY-ROSE LANZ

We are delighted to introduce our newest staff member, Emily-Rose Lanz! Emily is our new Membership Coordinator. She joined us in December of 2006, following the August 2006 retirement of Ann Merritt.

Emily, a Michigan native, worked as Special Events Assistant at Branford House at UConn Avery Point from 2004 until taking the position here. She is a student at Three Rivers Community College, and will transfer to UConn.

"I am thrilled to be joining the Museum and Archaeology Center at such an exciting time! I am very happy to be a part of the dynamic atmosphere surrounding our new exhibit and classroom space," said Emily-Rose. "I have long been passionate about history and how our actions today will be viewed by people in the future, and it is wonderful to be surrounded by people who share the same passion. I have enjoyed getting to know our members and I am looking forward to meeting the challenges of our growing Museum." Emily and her husband live in Ledyard with their dog. They are expecting their first baby (and future Museum member!) in October.

LOOKING FOR A SUMMER ADVENTURE?

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Leanne Kennedy Harty, Director
Emily-Rose Lanz, Membership Coordinator
Robert Thorson, Stone Wall Initiative
Katharine Hawkins, Graduate Student
Amanda Sullivan, Undergraduate Student
Shanna Morales, Undergraduate Student

VOLUNTEERS

Volunteers are a vital part of the Museum's effort to provide innovative programming and enrich the museum experience. We wish to thank the following individuals for joining the new volunteer program and we look forward to seeing a number of returning volunteers rejoin the program:

Mary Brescia, Jeffrey Egan, Frank Pearson, Michael Pontacoloni, Cynthia Redman, Rita Rehn, Paul Scannell.

CHECK OUT OUR

MUSEUM'S PROGRAMS!

Project O

In the Lab and Out To Sea!

Saturday, July 21, 10 am to 4 pm

UConn Avery Point Campus

Advance registration required: $30 per member, $40 per nonmember. Fee includes both morning workshop and afternoon cruise.

Spend a day experiencing marine science, both onshore and at sea, in this beautiful setting on the Connecticut shoreline. We will be in the Project Oceanology laboratory in the morning, exploring the identification and natural history of the animal and plant life of Long Island Sound, with special emphasis on the economically important species (like the ones we eat!). In the afternoon, we will take a voyage out to sea on the Envirolab II research vessel. During the 2 1/2 hour cruise on Long Island Sound, participants will experience hands-on marine science at the stern of the boat by pulling trawl and plankton nets, then examining the contents under the guidance of professional marine scientists. At the bow, operate the instruments and equipment used to study the physical and geological aspects of oceanography and look at the basic chemistry of seawater. Adults and children 6 and above. Children must be accompanied by an adult.

FOR EVEN MORE, GO TO:
www.cac.uconn.edu/currentcalendar.html

MEMBERSHIP

Standard membership benefits:
- •Free admission to special events
- •Reduced rates for workshops
- •15% discount at the UConn Co-op
- •Early notification of programs
- •Museum Newsletter

Standard Memberships
___ Family ($35)
___ Individual ($25)
___ Student Individual ($15)
___ Senior Individual ($15)
___ Senior Couple ($25)

Consider upgrading to an Owl Membership. These memberships provide special support for Museum programs. In addition to standard membership benefits, Owl Members receive guest passes, gifts, and more.

Owl Memberships
___ Saw-whet Owl ($65)
___ Snowy Owl ($125)
___ Screech Owl ($250)
___ Barn Owl ($500)

Donation
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Mail to: CSMNH, UConn, 2019 Hillside Rd., Unit 1023, Storrs CT 06269-1023

The Connecticut State Museum of Natural History and Connecticut Archaeology Center are part of the **College of Liberal Arts and Sciences.**

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