



HOW
PEOPLE
MAKE
THINGS

VISITING EXHIBITION

How People Make Things

Every object in our world has a story of how it is made. The *How People Make Things* exhibition tells that story by linking familiar objects to the people, ideas, and technology that make them possible. *How People Make Things*, inspired by the factory tour segments from the *Mister Rogers' Neighborhood* television series, offers hands-on activities using real factory tools and machines to create objects.

HOW PEOPLE MAKE THINGS THROUGH JUNE 2.



"Mom, I used to think I hated building things; now I think I like it."

—MONTSHIRE VISITOR

"Children learn that most things don't happen quickly or magically, but by hard work and persistence."

—MISTER ROGERS

"I like the fact that children can see basically how things in this world are made today."

—MONTSHIRE VISITOR



How People Make Things was created by Children's Museum of Pittsburgh in collaboration with Family Communications, Inc. (FCI), the producer of *Mister Rogers' Neighborhood*, and the University of Pittsburgh Center for Learning in Out-of-School Environments (UPCLOSE). The exhibit was made possible with support from the National Science Foundation and The Grable Foundation.

Outside Learning



Dear Friends,

The Montshire is unique in the world of science centers with its mix of interactive experiences inside the museum building and an extensive outdoor landscape showcasing the natural world.

Over the next several months, we'll be developing a plan to expand visitors' engagement outside the museum building. As part of this process, we'll be evaluating visitor comments and survey results. With support from the New Hampshire Charitable Foundation, we'll visit and closely examine a number of other museums, botanical gardens and arboreta across the country, and develop a series of recommendations for changes to our trail system and additional outdoor exhibit experiences. Our goal is to enhance the learning experiences for our visitors and deepen their engagement with the natural treasures found right outside our doors.

The possibilities are exciting, and I hope you will continue to offer your suggestions and feedback to enhance this process.

Thank you,

David Goudy
Executive Director



Many Montshire visitors think of the “museum” as what they find inside the building and in *Science Park*, without taking advantage of the Museum’s 100-acre property. The area supports an extensive trail system—including waypoints, outdoor exhibits, interpretive signs, and an astronomical stroll to the far reaches of the solar system—offering visitors an experience not found in most science centers.

Walk under the railroad tracks adjacent to *Science Park* and you’ll find the *Quinn Nature Preserve*, which features scenic views of the Connecticut River and accessible trails along the river and meadow. Exhibit stops along the meadow and river interpret the importance of the river as a migratory pathway and the role of the riparian buffer (the natural area alongside the riverbank) in maintaining the health of the river and the animals who live near it. The Museum has made a commitment to restoring this riparian area, to support native plant and animal populations. Meadow-side exhibits include the covered *Meadow Sounds Kiosk* and the *Solitary Wasp* exhibit.

To the south and west of the museum building, visitors find a set of exhibits along the *Ridge Trail* interpreting decay in the forest, the differing temperatures below-ground and above the treetops, the myriad forms of life found on the bark of a single tree, and the life in a woodland pond in the spring. The *Bird’s Eye View* offers a glimpse at what the forest looks like to a bird flying through the forest canopy.

And, to the north of the *Hughes Pavilion*, visitors enjoy the *Blood Brook Overlook* (once the site of a mill that used the water power of Blood Brook), the *Stone Wall* exhibit, and the covered *Animal Tracks Kiosk*, with information about the signs (tracks and ...ahem... other materials) that animals leave behind.

So, on your next visit to the Montshire, pick up a map and start exploring the Museum’s 100 acres. And, don’t forget to keep an eye out for wildlife along the way.

JENNIFER RICKARDS NAMED NOYCE LEADERSHIP FELLOW

Associate Director Jennifer Rickards is one of 17 museum leaders selected as a Noyce fellow. The Noyce Leadership Institute (NLI) brings together leaders in informal science education from around the world to act as change agents at the crossroads of societal trends, global issues, and the cutting edge of science. NLI envisions an essential and transformative role for science centers and other informal science institutions in the engagement of citizens of every age in understanding crucial science-related issues. Jennifer will focus on developing a community partnership to determine new strategies for the Museum to engage underserved families in our region.



NEW MONTSHIRE STAFF

We are pleased to welcome Diane Church to the visitor services team, while Bob Shannahan recently joined the facilities and maintenance staff.

2013 PHOTO CONTEST

Enter the 2013 Montshire photo contest. Montshire caters to a broad audience and this year's categories reflect that. Enter your best photos in any of the following three categories: children, families, or adults. Finalists will be selected, then everyone will have a chance to vote for their favorite photo online. Winners receive a \$25 Montshire gift certificate and their photos will be published in the Fall newsletter.

LUNCH SERVICE IN THE HUGHES PAVILION

No need to pack a lunch. Montshire visitors will be able to enjoy delicious lunch, beverages, snacks, and ice cream this summer. Maple Street Catering will be serving up a variety of sandwiches June 22–September 2, from 11 a.m.–4 p.m.

ALL ABOARD THE WHITE RIVER FLYER

Jump onboard the White River Flyer train for a great ride to the Montshire. There is a new schedule this summer: Thursdays, Saturdays, and Sundays, July 25–August 29. Check online for details.

NEW MCA LEADERSHIP

The Montshire Corporate Associates (MCA) began 2013 with new leadership and renewed energy. Two members of the Museum's Board of Trustees are serving as co-chairs of the

MCA: Grant MacEwan, of Mascoma Savings Bank, and Steve Voigt, with King Arthur Flour. They are excited about recruiting new business members and ensuring that the MCA offers the right selection of benefits.

"The Montshire Corporate Associates is a great way for local companies to support the Montshire and, in return, receive excellent benefits. It's a true win-win scenario," said Grant MacEwan. "The Montshire is a tremendous resource for families and many of King Arthur Flour's employee-owners take advantage of the discounts and family days offered through MCA membership," said Steve Voigt.

The next Employee Appreciation Day is Saturday, June 1. Employees of MCA member companies are invited to bring their families for a free visit. For more information contact michelle.kersey@montshire.org

NEW ENDOWMENT FOR SCHOOL PARTNERSHIPS

The Montshire Museum is pleased to announce the establishment of the Windsor and Marilyn Hunter Endowment for School Partnerships. This new fund will support the Museum's School Partnership Initiative, which is a long-term effort designed to strengthen the capacity of small, rural schools to offer a high-quality science education. Income from the endowment will support essential services such as teacher professional development, curriculum materials, classroom support and co-teaching, and community science events. We hope this generous gift will inspire others to help support the financial stability and sustainability of the School Partnership Initiative.

IN MEMORIAM:

PETER STETTENHEIM

Peter Stettenheim, a founding trustee of the Montshire Museum, died unexpectedly on January 20 at the age of 84. His signature is on the articles of incorporation filed with the state of New Hampshire to establish the Museum in 1974. Peter



served on the Board of Trustees for many years, helping lead the Museum through its challenging early years into an era of stability and growth. As an ornithologist and naturalist, his contributions to the Museum extended well beyond the board room; Peter taught courses on birds and documented countless events and visitors in his photographs. He will be missed.

CHILDREN AND YOUTH

Homeschoolers' Series: Aquatic Explorations

*Mondays, April 22, 29 & May 6
10:30 a.m.–noon for ages 6–8
1–2:30 p.m. for ages 9–12*
Explore aquatic life and get further acquainted with the many vertebrate species living in our local ponds and streams, such as frogs, salamanders, turtles, and fish. Use a microscope to get a close-up look and learn about aquatic insects and invertebrates. *Members \$60, non-members \$66*

Young Scientist Program

*Wednesdays, April 24–May 15
Morning, 9:30–11:30 a.m.,
or afternoon, 1–3 p.m.*
A weekly program that includes hands-on experiments, fun projects, and individual explorations in the physical and natural



sciences—all specially designed to get preschoolers (ages 4+) and kindergartners excited about science. *Members \$165 non-members \$180*

Friday Nights for Teen Tinkerers

*Fridays, March 29 & April 26
6:30–8 p.m.*
The tinkering studio is open! Design, create, and build some really cool stuff. For youth in grades 6+. *Members \$14, non-members \$16*

LEGO® Afterschool

*Mondays, April 29, May 6 & 13
(3-part series)
3:15–5:15 p.m.*
Design and create LEGO machines and robots. Learn about gears, linkages, and more. We'll design and build mini-machines, introduce LEGO robotics and simple programming, then make a robot move and respond to its environment. For children in grades 3–5. *Members \$90 non-members \$100*

Vacation Week Programs:

Wearable Electronics!

Tuesday, April 16. 10 a.m.–noon
Discover how easy it is to combine LED technology and coin batteries with some knowledge of circuits to light up a pin, hat, or shirt. Use our plain fabric or bring your own item of clothing. For children in grades 4–7. *Members \$45, non-members \$50*

A Parent–Child Workshop: Build It!

Tuesday, April 16. 2–4 p.m.
Calling all builders! Use real tools and a variety of materials to make a car, robot, house, or other amazing work of art. Add mini-lights to make your creation shine. For children in grades K–3 and a parent. *Members \$20, non-members \$25 per child/parent pair*

Recipes for Fun

Thursday, April 18. 10 a.m.–noon
Mix up your own play dough, finger paint, and sidewalk chalk using common household ingredients. For children in grades K–3. *Members \$30, non-members \$35*



ScribbleBots

Thursday, April 18. 1–3 p.m.
Learn how to create a cool mini-robot that draws as it dances. For children in grades 4–6. *Members \$40, non-members \$45*

Rockets Family Workshop

*Friday, April 19
10:30 a.m.–noon and 2–3:30 p.m.*
Build and launch your own rocket that is powered with compressed air and water! You'll get a chance to experiment with the perfect blend to make your rocket fly the highest. *\$20 per family*

* Requires pre-registration

SPECIAL EVENTS

Annual Egg Drop Challenge

Saturday, April 6, 2 p.m.

Design a container that will protect a raw egg from a harrowing 18-foot plunge. Build your container at home, or at the Museum from noon to 2 p.m. Then it's "eggs away" as you launch your design over the railing. For building guidelines, visit montshire.org/eggdrop.

Free with Museum admission

Ephemeral Zoo

Saturday, May 11

10:30 a.m.–3:30 p.m.

Experience the wonders of spring! Meet amphibian and aquatic creatures such as spotted salamander, wood frogs, and toads from local marshes and ponds. Take part in special indoor activities and hands-on explorations throughout the day.

Free with Museum admission

Super Science Days:

Combine some hot topics with really cool activities.

Free with Museum admission.

Nature: Up Close and Personal

Saturday, July 6

Up, Up, and Away!

Saturday, July 20

Splash! Exploring Water

Saturday, August 3

Microworlds: Investigation of the Very Small

Saturday, August 17

ADULTS

Montshire Unleashed

Fridays, April 5, July 19, 6–9 p.m.

The Montshire Museum is open after hours for adults of all ages. Pull up a stool at the Science Discovery Lab for some amazing activities, join a friend and try the "Montshire Challenge," or simply explore the Museum's exhibits on your own. Cash bar. Free for members, non-members \$12

MONTSHIRE SUMMER CAMP



Where Learning is Part of the Fun!

Montshire Summer Camp—an Upper Valley tradition for almost 30 years—continues to enhance its offerings with ten unique camp programs. Along with some favorites such as Preschool Nature Camp and Upper Valley Adventures, there are two new camps for youth entering 7th and 8th grade: Animate It! and Montshire Maker Camp.

"We continue designing programs for kids that support their developing interests and skills in nature and science," says Amy VanderKooi, the Montshire's Walter Meriwether and Eleanor D. Furlow Summer Camp Director. "Learning and having fun are what camp is all about—and with the help of our skilled staff, we do a lot of both."

Register soon for one or more weeks. Save \$15 when you register for two weeks, and \$30 for three weeks. Montshire members receive special member pricing. For more information, or to register online, visit www.montshire.org/summer-camp. Call 802-649-2200 (M-F, 8:30 a.m.–5 p.m.), or stop by the Museum with your questions.

"I didn't realize in such a short time frame, a child could become so interested in animals and the outdoors."

—MONTSHIRE CAMP PARENT



Elements of a Woodland Garden

Saturday, May 18, 9 a.m.–noon

Join Montshire's native plants gardener, Anne Fayen, to learn about the elements of a woodland garden.

Using Montshire's Woodland Garden as a model, learn about design principles, native plant selection and care, how to identify and accentuate natural features, and how to create a garden path. Limit 12 participants. Members \$60 non-members \$70

Pteridophytes in Vermont

Saturday, July 27

10 a.m.–2 p.m.

The Montshire Museum's 100 acres along the Connecticut River contain alkaline rocks. Learn about the extensive variety of ferns, club mosses, and horsetails that thrive in this environment.

We'll begin in the classroom, and then head outdoors. Limit 16 participants.

Instructors: Don Lubin and Ray Abain, fern enthusiasts. Montshire or NEWFS members \$46, non-members \$56

TEACHERS

Teaching Life Cycles, Habitats, and Seasonal Change with Insects & Amphibians

Friday, May 10, or Tuesday, August 20, 9 a.m.–3 p.m. Grade 1–3 teachers, \$125

Playing with Time

Imagine being able to speed up or slow down some of the world's most amazing natural phenomena.

Opens May 25



Watch a stream of water freeze midair as a set of separate drops, or watch millions of years of geological evolution unfold in just a matter of seconds. Manipulate time to examine the hidden world of change with a new traveling exhibition, *Playing with Time*, at the Montshire May 25 through September 6.

Playing With Time provides visitors with a hands-on experience using high-speed photography, time-lapse videos, natural records of change like eroded rocks and lake cores, and other "time-shifting" techniques to discover the changes that take place in the world beyond our perception. Visitors will be able to see some of the tools that help scientists make sense of how our world works.

Playing With Time is a co-production of the Science Museum of Minnesota and Red Hill Studios. The exhibit was made possible with support from the National Science Foundation.



Programs for Young Teens

One of the Montshire's strategic goals is to maintain our engagement with youth as they grow older.

Many teens tell us that they visit less often than they used to, but they still enjoy the challenges and experiences found at the Montshire. This year, we are offering a number of new, targeted programming opportunities to determine how we can best meet this group's needs and interests.

Drawing inspiration from the national "maker movement," the Montshire began offering a new program: *Friday Nights for Teen Tinkerers*. Youth in grades 6-9 are invited to come use their imagination and sharpen their neurons. "*Friday Nights for Teen Tinkering* is a chance for young people to use their creativity to make something," said Rachel Donegan, Montshire Educator and Program Manager. "Depending on the topic, they might learn how to solder, use iPads to create a stop-motion film, or create a hat or piece of jewelry with LEDs. Each tinkering night is an opportunity to play with ideas and hang out with other kids who like to investigate, problem solve, and make things." The next *Teen Tinkering Nights* are scheduled for March 29 and April 26.

Montshire is offering two new Summer Camp options this year for youth entering 7th or 8th grade. In our *Animate It!* session, participants will use science and creativity as they make short films. They will start with zoetropes and flipbooks, and then move into stop-motion filmmaking using cameras and computers. *Montshire Maker Camp* will incorporate similar tinkering activities offered in our *Friday Nights for Teen Tinkerers*, in a more intensive, week-long format. Additional sessions for this age group include *Aquatic Investigations*, *Kinetic Art*, and *Inventors' Workshop*.

Montshire's inaugural FIRST® LEGO® League team won an award for robot design and had the opportunity to compete in the New Hampshire state competition. We'll be recruiting a new team in the fall. It's a great opportunity for young people interested in engineering and robotics.

Everyone benefits from the opportunity to engage in science and develop their critical thinking skills, but the years leading up to age 13 are critical. Studies have shown that developing an interest in science by the end of middle school has a significant impact on future science and engineering career choices.



Playing with Time
Opens May 25.

Montshire
Museum

Spring/Summer

MARCH

29 Teen Tinkering **Y**

APRIL

5 Montshire Unleashed **A**

6 Egg Drop Contest **F**

16 Wearable Electronics! **C**

16 Build It! **F**

18 Recipes for Fun **C**

18 ScribbleBots **C**

19 Rockets **F**

22 Homeschoolers' Series: Aquatic Explorations **C**

24 Young Scientist Program, (series begins) **C**

26 Teen Tinkering **Y**

29 LEGO® Afterschool (series begins) **C**



MAY

3 Montshire Benefit Auction **A**

10 Teaching Life Cycles, Habitats, and Seasonal Change **T**

11 Ephemeral Zoo **F**

18 Elements of a Woodland Garden **A**

24 *Playing With Time*, exhibit preview, 5:30–7 p.m. **F**

25 *Playing With Time*, exhibition opens **F**

JUNE

1 MCA Employee Appreciation Day

JULY

6 Super Science Day—Nature Up Close **F**

19 Montshire Unleashed **A**

20 Super Science Day—Up, Up, and Away! **F**

27 Pteridophytes in Vermont **A**



AUGUST

3 Super Science Day—Splash! Exploring Water **F**

17 Super Science Day—Microworlds: Investigations of the Very Small **F**

20 Teaching Life Cycles, Habitats, and Seasonal Change **T**

Always check www.montshire.org for the most up-to-date information, full program descriptions, and to register.

C = Children **F** = Families **A** = Adults **T** = Teachers **Y** = Youth

Calendar



www.montshire.org

MONTSHIRE MUSEUM

The Montshire Museum of Science features exhibits and programs on natural and physical sciences. The Montshire is an interpretive center for the Silvio O. Conte National Fish and Wildlife Refuge. The outdoor Science Park leads to a network of walking trails on our 110-acre property.

Hours: Open daily 10 a.m. to 5 p.m.
Closed Thanksgiving, Christmas.

Phone: 802-649-2200

Web: www.montshire.org

Admission fee

\$12 adults, \$10 children ages 2–17.
Free for Museum members and children under the age of 2.

Non-Profit Org.
U.S. Postage
PAID
Permit No. 170
White River Jct., VT



Montshire Museum of Science
One Montshire Road
Norwich, Vermont 05055

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MONTSHIRE NEWS

The Montshire Museum of Science publishes *Montshire News* three times a year. Montshire members receive a free subscription.

Executive Director David Goudy

Associate Director Jennifer Rickards

Editor Beth Krusi

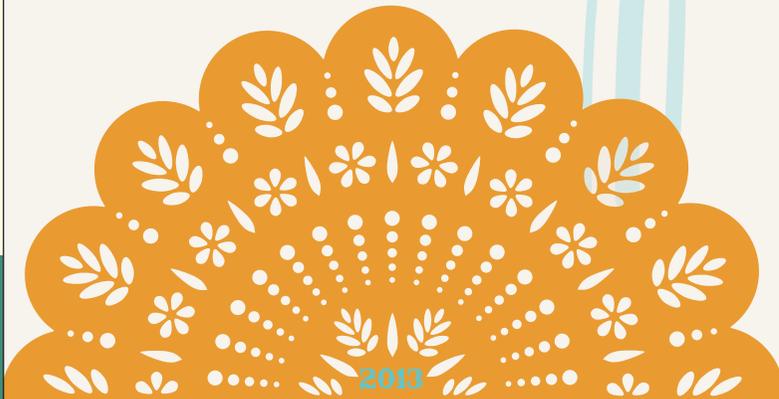
Design Wendy McMillan Design



First floor exhibit spaces and bathrooms are entirely wheelchair accessible. Second floor exhibit spaces can be reached by elevator. Several nature trails on the Quinn Nature Preserve are also wheelchair accessible.

FIDDLEHEAD FLING

BENEFIT AUCTION
MONTSHIRE MUSEUM OF SCIENCE
FRIDAY, MAY 3
6 P.M.



2013

www.montshire.org/auction