It is springtime again in the Brandywine valley, a time when the Hagley community revels in the emergence of our vibrant azaleas, avenues of lush cherry blossoms, and flowering dogwoods that stretch their arms gracefully over millraces. During this season, it is easy to forget that Hagley’s museum and library occupy a site that was once a beehive of industrial activity—a place where trees were few, acrid odors filled the air, and grinding machine parts produced a discordant music.

The du Ponts were adept at using the tools of hydropower to harness the Brandywine’s awesome force, bending it to Hagley’s peculiar geography and the requirements of their manufacturing plant. Sluice gates, waterwheels, turbines—all were brought to bear to channel the turbulent waters for productive uses.

I am delighted to announce that after a long hibernation, one of those tools has been brought back into service. The story that follows describes a three-year effort by a creative team of Hagley curators, technicians, and volunteers to reinstall a vintage turbine in a restored millrace. This resurrected turbine will once again drive machinery inside our Machine Shop and will present our visitors with a tangible and compelling example of water power at work. It’s a slice of the nineteenth century brought to life, and a tantalizing foretaste of projects we are planning to set the venerable DuPont powder yards in motion. Please come visit the turbine and see for yourself how the wheels are turning at Hagley!

On another positive note, Hagley welcomes to our Board of Trustees Dr. Steven W. Usselman, who is professor of history and Chair of the School of History, Technology, and Society at Georgia Tech. He is a specialist in the history of technology, innovation, and American political economy, and has published over two dozen refereed articles and book chapters, including many pertaining to IBM and the computer industry.

Finally, you will notice that this issue of the magazine incorporates Hagley’s 2013 annual report. Thank you for supporting Hagley through your donations of time, energy, and financial contributions.
On June 7, Hagley will take a huge step forward in advancing its goals of teaching stories of innovation, integrating more technology and engineering activities into the guest experience, bringing the powder yards to life, and becoming more sustainable. On that day, it will crank open the sluice gate, bringing the rushing power of the Brandywine to a newly restored water turbine, returning hydropower to our nineteenth-century Machine Shop.

The Type A Hercules Turbine Waterwheel was manufactured by the Holyoke Machine Company, which is still in business today. It was designed by John B. McCormick, widely considered one of the most important innovators in hydropower, whose inventions dramatically improved America’s industrial output in the nineteenth and twentieth centuries. At the time of its introduction, McCormick’s turbine was cutting-edge technology and represented the DuPont Company’s commitment to innovation. The technology he invented in the 1890s has been adapted and is in use today in the turbochargers of high-performance cars.

In addition to helping Hagley teach about innovations in technology and engineering, operation of this turbine will also allow Hagley to demonstrate another link in the story of the evolution of water power that starts at the Birkenhead waterwheel and will eventually culminate in the generation of green electricity through modern turbine technology. The Hercules turbine will generate 43 horsepower, more than enough to power the Machine Shop, taking it off the electrical grid, reducing Hagley’s carbon footprint, and enhancing Hagley’s sustainability into the future.

Off The Grid

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Hagley Volunteer Charlie Quarles operates a lathe in Hagley’s Machine Shop.

Innovation with Libations

Join the Golden Pheasants networking group to celebrate the completion of this project!
Thursday, June 5
5:30 to 7:30 p.m.
Reply by May 30
Hagley members $15
Non-members $20
Includes drink ticket, complimentary beer sampling, and light refreshments. Must be 21 years or older to attend.
Reservations required, call (302) 658-2400, ext. 235 or e-mail kkelleher@hagley.org.
Nearly three years ago, Hagley staff reached into a deep hole and pulled out two nineteenth-century water turbines. These rare iron remnants of Hagley’s industrial heyday likely escaped World War II scrap metal drives because of their hidden location under piles of rubble and decades of overgrowth. For years, Hagley staff members suspected that a treasure lay buried in this area. A gift from the estate of Victor M. du Pont enabled us to find out.

John McCoy, Hagley’s curator of mechanical exhibitions, has been working with a team of Hagley staff, interns from the American College of Building Arts, and volunteers Dan Caster, Irv Levine, and Gordon Wozak for three years to restore, repair, and reconstruct the 120-year-old turbine.

Reconstructing a nineteenth-century turbine is a big job—particularly when many pieces are missing and can’t be found at the local hardware store. Hagley staff members were undaunted. Early repairs to the turbine were conducted in the Machine Shop, which had equipment big enough to handle the job. New gears were cast from patterns that had long ago been repurposed as decorations in the school program space. But the biggest coup was locating a set of pulleys that were the right size. Long retired in a back field, these two pulleys were donated by Mr. and Mrs. Glenn Barlow. The project could not have moved forward without them.

A 120-Year-Old Treasure

1) The coal mills originally powered by the turbine.
2) Summer of 2011 the turbine is found and recovered. 3) Staff inside the deteriorated iron flume that brought water from the race to the turbine.
4) Old technology employed in the reconstruction. 5) When the Brandywine froze, back-up steam power was used to run the mills.
6) Heavy timbers reinforced with steel support the turbine.
Hagley Makes a Splash with H2 Oh!

This spring Hagley will debut a walking tour focused on the power of water. The H2 Oh! tour examines the evolution of water power at Hagley from the waterwheel to the steam engine and looks at ways that the DuPont Company harnessed the power of the Brandywine to make black powder for more than 120 years.

Guide Sandra Bordley will take visitors on a ninety-minute journey through the innovation of water power as exhibited in the Hagley powder yards. Along the way participants will discover why the Brandywine Valley was ideally suited to support so many mills.

This tour, beginning at the Eleutherian Mills dam, offers guests a rare opportunity to see up close the original powder yards built in 1802. The tour will also include the Birkenhead waterwheel, the graining mill, and the newly restored turbine that will be bringing green energy back to the powder yards beginning in June. Visitors will try their hands at operating a miniature roll mill that is part of the water power models, along with other activities.

Tours will be offered on June 7 and July 5 at 11 a.m. and 2 p.m. Tours involve walking on uneven ground and will take place rain or shine.

Hagley’s walking tours have been a popular addition to visitor programming—be sure to make your walking tour reservation by calling the Visitor Center at (302) 658-2400, ext. 261. Spaces for these tours are limited.
Important changes are occurring with Hagley’s Creek Kids Youth Leadership Program. After an award-winning season in 2012-2013, the twenty-five teens in the program and Hagley staff felt that a full rebranding was called for that would better reflect the change and growth of both the teens and the program itself.

With lots of input from the teen participants, the decision was made to rename the program “Hagley’s Youth Leadership Program” (YLP). Our teenage volunteers, former “Creek Kids,” will be called “Youth Leaders”—a title that better fits a young adult learning leadership and life skills. Rebecca, a teen in the Youth Leadership Program, said, “Being a leader is truly about finding new and innovative ideas.” Visit www.hagley.org/ylp to watch a film in which the teens talk about their experiences.

A major component of the YLP is the creation of a series of summer events for families at Hagley. These special themed programs are created by the teens specifically for kids and families. Now called By Kids, For Kids, these events offer all visitors new ways to experience all that Hagley has to offer. Each program is unique with numerous activities that engage the mind, activate the senses, and encourage exploration of new ideas about the past, present, and future.

Help support these dedicated volunteers by attending their summer events: By Kids, For Kids! Visit www.hagley.org for more information about each event.

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**By Kids, For Kids!**

**PastTimes: Nineteenth-Century Fun**
Saturday, May 17
1 to 4 p.m.

**EarthWorks: Resources and Nature**
Saturday, June 21
1 to 4 p.m.

**H2 Oh!: The Amazing Power of Water**
Tuesday, July 15, and Saturday, July 19
1 to 4 p.m.

**Nation of Innovation**
Tuesday, August 5, and Saturday, August 9
1 to 4 p.m.
Fireworks will burst over the Brandywine on Fridays, June 13 and 20, as Wilmington Trust/M&T Bank presents “Fireworks at Hagley: Crazy About Cars!” Hagley’s collections include rare automotive memorabilia in the Z. Taylor Vinson Collection, which is now open to researchers. It features many car catalogs, advertisements, and photographs.

Gates open at 5 p.m. for an evening of family fun. Kid Central welcomes families to bounce around and play. Wines, dinners, home goods, and theater tickets will be raffled. Participants can pack a picnic, order a basket from Toscana, or purchase food from vendors. That includes crab cakes sandwiches from Toscana Catering at Hagley, wraps from George Malin’s Wraps, carnival food from Bill Thompson’s Funnel Cakes, and treats from the Creamery at Woodside Farms and Kimo’s Shave Ice.

Tickets to this members-only event are $35 for adults, $15 for youths (fourteen and younger). One parking pass is included when four adult tickets are purchased. Additional parking passes are $35.

Premium parking passes are $100 and include quick exiting at the end of the evening.

For more information, contact Kim Kelleher at kkellerher@hagley.org or (302) 658-2400, ext. 235.
On Wednesdays in the summer, Hagley opens its property for walkers and cyclists. From sweet treats and romantic evenings to brisk hikes and beautiful Brandywine views, summer is cooler along the Brandywine River.

This year, Bike and Hike is starting a week earlier. The season kicks off on June 25 with lots of special activities including live bluegrass music from the June Bugs, outdoor chicken barbecue at the Belin House, ice cream from Woodside Creamery, nineteenth-century games, and spin art on our bike-powered Fender Blender.

Bike and Hike is a great date night. Order a picnic tote from the Belin House Organic Café. For $20 you get a choice of sandwiches, a salad, two sides, cookies and drinks, packaged in a handmade tote. Bring a bottle of wine and find your perfect picnic spot. Be sure to order by 3 p.m. the Tuesday before.

The season ends with Hagley’s first “Dog Day of Summer.” Leashed dogs are welcome all evening on August 27. Waggie’s Treats by Maggie and Friends will be on site with samples of dog treats.

Some Bike and Hike evenings feature special activities, such as appearances from local community groups, sweet treats, and Hagley’s own Fender Blender. Visit www.hagley.org for the dates of special activities.

Photos by Ashley Schroeder
Get Moving This Summer

Hagley is launching a Let’s Move! initiative called the Hagley Hikers program that will kick off during the June 25 Bike and Hike. Visitors, ages six and older, can sign up to track the miles they walk at Hagley this summer. During the weekly Bike and Hike evenings, visitors will have access to the entire three-mile loop from the Visitor Center to Eleutherian Mills. Also, Hagley’s powder yards are available for walking every day, included with general admission and free for members. Hagley Hikers who walk eighteen miles at Hagley this summer, or visit Hagley six times between June 25 and September 25, will be eligible for a twilight hayride along the Brandywine through Hagley in early October. Interested hikers may sign up at any Bike and Hike or in the Visitor Center during regular museum hours. A mileage map and progress chart will be given to each participant.

Date Night Picnic Totes are the perfect pairing for your evening along the Brandywine. They come with two sandwiches, one salad, two side dishes, cookies, and beverages. Orders for these $20 picnic totes are due by 3 p.m. on Tuesdays. Call 302-658-2400, ext. 271, to order your tote. Plates, napkins, and utensils are included. The totes, made by a local artisan, are yours to keep.

Choose two sandwiches from the following:
- Tarragon chicken salad wrap with baby spinach and tomato
- Grilled vegetables with goat cheese on multigrain baguette
- Roast turkey BLT wrap with sriracha mayo and spring mix
- Ham and Gruyère cheese with coarse mustard, lettuce and tomato on multigrain

Choose one salad (serves two):
- Classic Caesar salad
- Tossed salad with choice of dressing

Choose two sides from the following:
- Grilled vegetables
- Tuscan white bean salad
- Balsamic marinated button mushrooms
- Tri-color pasta salad
- Fruit skewers with raspberry yogurt dip

Choose two beverages: Coke, Diet Coke, Sprite or bottled water

Four cookies (two chocolate chip, one oatmeal raisin, one peanut butter chip)
Hagley recently received a donation of Hiebler family papers that include letters written by Alfred I. du Pont (1864-1935) to his grandsons, Bayard Hiebler (1911-1945) and Benno Hiebler (1914-1980). The Hiebler brothers lived in Germany and received these letters from 1927 until their grandfather’s death in 1935. Their mother, Madeleine (1887-1965), was Alfred I. du Pont’s eldest child.

The majority of the letters were written by Alfred I. du Pont to Benno Hiebler and contain a wealth of information about his interests. Du Pont vividly described his automobiles, yachting and boating, family news, his dogs, travel, and his homes, Epping Forest near Jacksonville, Florida, and Nemours in Delaware. He gave advice about women and opinions on politics and world affairs. In a letter dated May 17, 1933, du Pont wrote, “It seems to me your Germany is kind of on the bum these days. You never know what Hitler is going to do next; but, then, that’s what one would expect of a man placed in the supreme position of control, as he is, and who has never had the benefit of a sound education. No educated man would have behaved as he did towards the poor Jews.”

The collection also includes letters written by du Pont’s third wife, Jessie Ball du Pont, to Benno Hiebler and his family from 1951 through 1962, and there are also papers pertaining to the settlement of Alfred I. du Pont’s estate. Until receiving this gift from Vera Hiebler, Hagley had very few papers of Alfred I. du Pont.
The library was recently awarded $5,560 from the National Endowment for the Humanities to rehouse the J. Victor Dallin Aerial Survey Collection. The photos are of the Delaware Valley and mid-Atlantic region. Dallin was a Canadian who flew for the Royal Flying Corps in World War I where he learned the craft of aerial photography. He settled near Philadelphia, worked with Aero Service Corporation for several years, and then opened up his aerial survey business near the current location at the Philadelphia International Airport.

The Dallin Collection is comprised of more than 13,000 images, most taken between 1924 and 1941. Their formats include glass plate negatives, lantern slides, and photographic prints. They capture a region at a time of rapid transition. The collection is among the most loved of Hagley’s images. The more than 7,000 digitized images made from the collection have received a million-plus page views since they were made available online in 2008 (goo.gl/Bd8xSy). The images show urban, suburban, and business growth. The rise of consumer culture, recreation, and modernity is cast in material, technological, economic, environmental, and geographical terms in these photographs, making them a tremendously rich source for researchers.

The NEH’s generosity will enable Hagley to purchase materials—acid-free folders, boxes, and envelopes—as well as shelving components.

**NEH Grant for Aerial Collection**

Left: Dallin Aerial Survey staff and camera (Dallin on left), 1925.

Top: The tenth hole of the East Course of the Merion Cricket Club (now the Merion Golf Club), Ardmore, Pennsylvania, during the U. S. Amateur Championship Tournament, 1930.

Bottom: The Brandywine near Joseph Bancroft and Sons and Augustine Paper Mills, 1931.
Some dye samples on nylon, as vibrant as the day they were made seventy-two years ago, are now part of Hagley’s collections. In order to reduce the dependence on German dyes, DuPont entered into the dyestuffs business in 1917 by starting a dye works at Deepwater, New Jersey, under the direction of chemist Arthur D. Chambers. By the time these samples were made on March 18, 1942, new synthetic dyes were being created specifically for DuPont’s innovative materials, such as nylon and Orlon. The Deepwater plant continued to research and produce dyes until 1980.

Dr. Dale Babcock, who had been working for DuPont since 1929, acquired these samples when he was working for the nylon division in 1942. Later that year, he was transferred to work on the Manhattan Project, which developed atomic bombs. He worked with Enrico Fermi at the Hanford site in Washington.

Babcock’s daughter, Ardis B. Crull, recently donated the dye samples to Hagley.
Hagley Acquires Metroliner Records

Through the generous gift of Robert B. Watson of Valley Forge, Pennsylvania, Hagley recently acquired his personal files covering his work developing the Metroliners, the first generation of high-speed trains between New York and Washington. They give an extremely detailed look at what happened when political pressures and untried new technologies combined with exasperating results.

The project, launched in 1964-1965, was designed to match or surpass the Japanese “bullet trains.” The entire order of cars was placed before any prototype testing. A separate test train began running only while Metroliner cars were under construction. Only with great effort were six cars rendered reliable enough to start revenue service on January 16, 1969, twenty-two months behind schedule.

The Metroliners never delivered the 160 mile per hour speeds set for them, but they did entice business travelers back to the rails. After they had passed the million-mile mark, they were downgraded into local service, demotored, or scrapped, having lasted barely a decade. Today, Amtrak is contemplating a fourth generation of high-speed Northeast Corridor trains.

Watson is a retired mechanical engineer who was the point man for contacts with the government and manufacturers. He supervised the attempts to get cars and electrical systems to pass acceptance tests and enter passenger service. His files give a day-by-day account of this many-sided, decade-long struggle.
Fine Fashion From Qiana

New York fashion designer Charles Kleibacker (1921-2010) created this stunning red cocktail dress out of DuPont’s new Qiana® fabric in the late 1960s. Kleibacker was known as the “master of the bias cut” for his complex bias-cut designs. His most notable clients included former first lady Pat Nixon and actress Diahann Carroll.

Kleibacker was one of the first designers hired by DuPont to work with Qiana® after its introduction in 1968 to show how it could be used in couture. In the fall of 1971, DuPont hired him to travel to department stores in 15 major cities to give couture sewing clinics. These clinics provided free sewing lessons on how to create fashions using Qiana® for home sewers. He typically started out each program asking “What makes a couture dress cost $500? It’s a matter of skill, time and attention to detail. And women who sew for themselves can build these same high standards into their clothes if they have the determination to do so.” Kleibacker’s programs were extremely successful.

This dress is on display in the exhibition “Fashion Meets Science: Introducing Nylon” in Hagley’s Visitor Center, open through January 25, 2015.
At Fireworks at Hagley presented by Wilmington Trust/M&T BANK on June 13 and 20, you can enjoy pyrotechnics exploding to music set to this year’s theme, “Crazy About Cars!” Can you match the song title with the composer on the right?

A. On the Road Again 1. Aretha Franklin
B. I Can’t Drive 55 2. Queen
C. I’m in Love With My Car 3. Tracy Chapman
D. Little Red Corvette 4. Bruce Springsteen
E. Fast Car 5. Willie Nelson
F. Freeway of Love 6. Prince
G. Pink Cadillac 7. Sammy Hagar

Answers: Car Songs: A-5, B-7, C-2, D-6, E-3, F-1, G-4

On July 15 and 19, dive into the amazing world of water at By Kids For Kids - H2 Oh! Find the water-related words in the grid below.

**WORD LIST**

- Brandywine
- Current
- Drops
- Flow
- Lake
- Ocean
- Pond
- Power
- Precipitation
- Puddle
- Rain
- River
- Stream
- Turbine
- Waterwheel
- Wave
- Wet

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**H2 OH! WORD SEARCH**

On July 15 and 19, dive into the amazing world of water at By Kids For Kids - H2 Oh! Find the water-related words in the grid below.
Hagley Library recently overhauled the way it provides reference services. The change is not obvious. But staff members are proud to have made a qualitative improvement.

For researchers who visit the library building, the reference desk is now staffed at all times by two librarians. Staff members from the Published Collections department and from the Audiovisual Collections and Digital Initiatives department now work together, sharing duties at the reference desk. Having two librarians on hand at all times means that the desk can be continuously staffed while requested collection items are being retrieved.

However, the main reason for the change is the dramatic rise in phone and online inquiries. All telephone calls and emails from researchers now go to the reference desk. The reference staff then routes each inquiry to the appropriate staff member to ensure that the best service is provided in a timely fashion.

New software enhancements allow greater staff collaboration in answering inquiries.

Finding Aids Database

Hagley has also launched a database of finding aids to help researchers locate primary source materials. This Google-optimized online resource allows users to conduct full-text searching of collection finding aids and browse alphabetically by collection title and collection creator. This quick search tool makes Hagley Library’s collections more accessible for off-site users and enables all researchers to target collections that are most relevant to their interests.

Finding aids identify, describe, and list collection contents. Although these collections are recorded in our online library catalog, the new finding aids provide a more detailed inventory of contents. Most finding aids also contain information about the person or organization who created the collection. Typically, these guides do not describe individual items like a catalog does. Instead, finding aids describe groupings of materials, such as the contents of a folder or a box, as well as the organizational context in which these materials are stored.

The database contains finding aids for more than 300 collections of manuscripts, photographs, audio, video, and digital records. Over the next few years, this number will grow. Though a huge undertaking, the database is just one step toward Hagley Library’s ongoing effort to make our collections more publicly accessible.

To explore the new database, visit http://findingaids.hagley.org.
Gardens and Springs

1) The Gardeners’ Book

This guide by Diana Craig is packed with useful tips, surprising ideas, and amusing anecdotes, and is perfect for embarking on a new project, or just for inspiration on how to rejuvenate or improve an existing garden.

A celebration of the wonderful and ancient art of gardening, this is also a compendium of practical tips. It includes gardening lore and history; garden games; ideas for making a garden the most impressive on the block; how to make and nurture a compost heap; when to sow a lawn; how to keep tools in pristine condition; and advice on planning a garden to maximum effect.

*Item #6384 - $15.95*

2) Brandywine Springs Amusement Park

In this title by Mark R. Lawlor, learn the interesting history of this historic site, from the meeting spot for General George Washington and his lieutenants to its development into an amusement park.

*Item #6504 - $25.00*

3) Stand Up And Garden

The no-digging, no-tilling, no stooping approach to growing vegetables and herbs, by Mary Moss-Sprague.

*Item #6278 - $16.95*

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**Hagley Store Information**

Visit the Hagley Store online at [www.hagley.org](http://www.hagley.org).

Hagley members receive a 10 percent discount at the Hagley Store.

Open daily from 9:30 a.m. to 5 p.m.

(302) 658-2400, ext. 274
Parents want their children to have meaningful lives, to be part of a community, and to find value in everyday experiences. Autism Delaware’s Productive Opportunities for Work & Recreation (POW&R) program helps “adults with autism spectrum disorders find and be successful at employment, volunteer activities and recreation.” For several years, young adults in POW&R have volunteered Friday mornings at Hagley, and we are grateful for their help. Over the course of a year, POW&R volunteers spend more than 100 hours stuffing, labeling, coding, and stamping Membership, Marketing, and Special Events departments’ materials.

“We look forward to seeing our friends each Friday,” said Development Coordinator Cindy Gamble. “We count on them, and they always fulfill their commitment to Hagley.”

Katina Demetriou, POW&R program director, stresses the importance of relationships like this one. “Our partnership with Hagley has allowed POW&R participants the opportunity to develop critical work skills as well as social skills that are necessary for employment.”

In addition to getting much needed work completed, Hagley staff has also developed a greater understanding of working with individuals who have autism and gained insight to the autism community. Opportunities for creating strong bonds in the community come to Hagley through many avenues—this one comes every Friday.
Volunteers by the Numbers in 2013

548 volunteers total
401 adults, 147 young people
the youngest is 11 and the oldest is over 90

35 years
longest term of service so far by a current volunteer

20,985
the total number of hours of volunteer service given

$2,465
donated to the Hagley school scholarship fund through the volunteer handwork group efforts

hundreds
of flowers have been planted, cared for, and arranged by volunteers

thousands
of objects inventoried, shelved, filed, and catalogued by volunteers

tens of thousands
of visitors have interacted with volunteer historical interpreters

priceless
is the value of volunteers’ contributions to Hagley Museum and Library.

Want to sign up? Visit www.hagley.org/volunteer today!

*Image: Volunteer Hetty Francke at Hagley’s NatureFest*
Saturday, May 24 - 1 to 4 p.m.
Science Saturday: Egg Drop
During today’s activity, each visitor (or family) will be given four pieces of white paper and one meter of tape to construct a “landing pad” to keep an egg from breaking when dropped. Included with admission, free for members. Sponsored in part by Delmarva Power.

Saturday, May 31 - 11 a.m. and 2 p.m.
Walking Tour - Sights, Sounds, & Smells
Get an in-depth, behind-the-scenes look at the black powder process, with an explosive finish! Included with admission, free for members. Reservations recommended, (302) 658-2400, ext. 261.

Saturdays, June 7 and July 5 - 11 a.m. and 2 p.m.
Walking Tour - H2 Oh!
Discover the evolution of water power at Hagley from the waterwheel to the steam engine and ways the DuPont Company harnessed the power of the Brandywine to make black powder for more than 120 years. Included with admission, free for members. Reservations recommended, (302) 658-2400, ext. 261.

Fridays, June 13 and 20
Wilmington Trust/M&T Bank Presents: Fireworks at Hagley - Crazy About Cars!
This year’s members-only fireworks event, often called the best fireworks show in Delaware, celebrates America’s love affair with the automobile. Featuring activities for young visitors in Kid Central, a raffle booth and silent auction, light-up toys from the Hagley Store, a fantastic food court, and more! Call the membership office at (302) 658-2400, ext. 235, for more information.

Saturday, June 21, 2014 - 1 to 4 p.m.
By Kids, For Kids - EarthWorks: Resources and Nature
Discover the underestimated, destructive, and tranquil power of nature! Explore the influences of nature on our world, both today and in the nineteenth century. Investigate how nature has shaped Hagley, from making gunpowder to fishing. This program is developed by Hagley’s Youth Leadership Program. Included with admission, free for members.

June 23-27 - 9 a.m. to 3 p.m.
Summer Camp: Lost Skills and Arts
This popular summer camp returns with new hands-on activities and takes campers back in time when clothing was homemade and food was home grown. Registration required, visit www.hagley.org/camp or call (302) 658-2400.

Wednesdays, June 25 through August 27 - 5 to 8 p.m.
Bike and Hike Evenings
Visitors can stroll and cycle the grounds of Hagley on Wednesday evenings. Enjoy our three-mile loop through the property from the Visitor Center to Eleutherian Mills and back. Bring a picnic or dine at the Belin House Organic Café. The June 25 Kickoff Night features activities on Workers’ Hill with live music, nineteenth century games, and more! Visit www.hagley.org for more information. Admission $2 per person, free for members.

Saturday, June 28 - 1 to 4 p.m.
Science Saturday: Against the Wind
Today’s activity involves taping index cards to toy cars to discover what shape allows the car to move the fastest. Included with admission, free for members. Sponsored in part by Delmarva Power.

July 7-11 - 9 a.m. to 3 p.m.
Summer Camp: How to Succeed in the 1800s
This brand new camp offers a chance to explore many of the different jobs and detailed craftsmanship which guaranteed Hagley’s success in the nineteenth century. Registration required, visit www.hagley.org/camp or call (302) 658-2400.

July 15 and 19 - 1 to 4 p.m.
By Kids, For Kids - H2 Oh!: The Amazing Power of Water
Dive into the amazing world of water—without getting wet! From aquatic life to astounding innovations, water influences both our daily life and the future. Discover how the Brandywine River shaped the world in the nineteenth century, and chill out with some watery treats. This program is developed by Hagley’s Youth Leadership Program. Included with admission, free for members.

Saturday, July 26 - 1 to 4 p.m.
Science Saturday: Tumbling Tower
During today’s activity, visitors can experiment with removing supports from a tower constructed out of cardboard tubes and sheets to better understand structural supports in buildings. Included with admission, free for members. Sponsored in part by Delmarva Power.

July 28 - August 1 - 9 a.m. to 3 p.m.
Summer Camp: Gears, Engineers, and Science Frontiers
This camp returns with fresh engineering challenges from building catapults to electrical circuits. Registration required, visit www.hagley.org/camp or call (302) 658-2400.

August 5 and 9 - 1 to 4 p.m.
By Kids, For Kids - Nation of Innovation
Discover the Industrial Revolution at Hagley! Investigate the changes in power, technology, and industry from the nineteenth century to today’s world. Visitors will explore and interact with innovations of the past, present, and even explore what the future has to hold! This program is developed by Hagley’s Youth Leadership Program. Included with admission, free for members.

Saturday, August 9
Walking Tour - Rocks and Roll Mills
Explore the geology of the Brandywine Valley and its impact on the milling industry. Work with fellow guests to cut a piece of Delaware Blue Rock and take a souvenir home. Included with admission, free for members. Reservations recommended, (302) 658-2400, ext. 261.

Saturday, August 23 - 1 to 4 p.m.
Science Saturday: Leaf Packs
Today’s activity invites visitors to explore and learn about the macroinvertebrates in our river through a leaf pack. Included with admission, free for members. Sponsored in part by Delmarva Power.
Last year I wrote to you about the exciting changes taking place at Hagley as we embraced a new strategic plan, fine-tuned our mission, and crafted a vision to be the place “Where innovation inspires and imaginations run wild.” When I wrote that I had no idea that 2013 would bring many changes to Hagley beyond what we had planned.

At the end of June we said farewell to Geoff and Pat Halfpenny who repatriated to the UK after many years in the United States. Under Geoff’s direction we addressed many long-term strategic issues, producing a historic preservation plan for the many structures throughout the 235-acre site. With his guidance we began expanding our activities and shifted our focus to STEM education and partnerships.

Stepping in to further the strategic plan over the summer was Dr. Barbara E. Benson, the retired executive director of the Delaware Historical Society. Dr. Benson’s familiarity with Hagley allowed her to jump right into the interim executive director’s role and lead discussions on how to realize Hagley’s Vision 2020. The progress we made under Dr. Benson’s direction was exceptional and the Board is truly grateful for her service.

In the beginning of the year, the Board convened a search committee and with due diligence by mid-summer we unanimously agreed upon David A. Cole as our new executive director. Dr. Cole’s impressive credentials, including experience at Harvard and at the Whitehead Institute in Cambridge, Massachusetts, were just part of the reason we selected him. He embraces the role of the entrepreneur, bringing an innovative spirit to Hagley as he gets to know us, and we him.

Thank you for welcoming David and his family to Hagley. He has important ideas that will help us reach our vision of Hagley in 2020. Your support for us has never been more important and I want you to know how much I, and the entire Board of Trustees, value your association with us.

Henry B. duPont IV
President

PRESIDENT’S REPORT

ELEUTHERIAN MILLS - HAGLEY FOUNDATION 2013

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Yong Zhu

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Natalie Riegel Weymouth

Honorary Trustees
Mr. & Mrs. Thomas C. Marshall, Jr.
Sister Pauline M. McShain, SHCJ
Margaretta K. Stabler

Hagley Management Team
Geoff Halfpenny
Executive Director
Barbara E. Benson, Ph.D.
Interim Director
David A. Cole, Ph.D.
Executive Director
Marjorie P. Kelly
Executive Administrative Assistant
Jeanne Belk
Finance Director
Michael Downs
Director of Facilities
Robert W. Hill
Director, Human Resources
Joan R. Hoge-North
Director, Museum Services
Jill A. MacKenzie
Director, External Affairs and Development
Erik P. Rau
Director, Library Services

*deceased
Dear Friends,

This is my first opportunity to capture a year in the life of Hagley, a remarkable institution that takes justifiable pride in its recent accomplishments, while keeping both eyes fixed on the future. For those of you who know us well, it will come as no surprise that a year at Hagley features numerous examples of inspired service to current visitors, as well as efforts to lay a strong foundation for the next generation of guests to walk through our gates. As a newly minted member of the team (I arrived only this past September), I can attest that Hagley’s embrace of today and tomorrow, in equal measures, makes a powerful first impression. Allow me to share with you just a few of the ways in which Hagley made an impact in 2013—and planted seeds for 2014 and beyond:

The Hagley Museum is a wonderful place to explore, and be inspired by, the history of innovation. In 2013, we marked the seventy-fifth anniversary of an important milestone in that history: the introduction of nylon as a fashion product. Our exhibition “Fashion Meets Science: Introducing Nylon” opened in April and tells the story of the creation of this miraculous product in the DuPont Company laboratories, as well as chronicles nylon’s long-term impact on the fashion industry. The story of nylon ties the process of fundamental scientific investigation to the analysis, and indeed creation, of a consumer market for a product—a perfect marriage between discovery and application that captures the essence of innovation. “Fashion Meets Science” is a wonderful illustration of how innovation works, but sometimes it’s nice to learn while getting your hands dirty. The 2013 Invention Convention offered visitors—young and young-at-heart—a chance to experiment with, and learn about, the many applications for 3-D printing technology. The popularity of this stimulating January event inspired our education staff to create Science Saturdays, a series of monthly events in which families work together to solve science and engineering challenges. Science Saturdays are hosted at the museum, but we also appreciate the importance of extending the Hagley experience beyond our creekside site. In 2013, we formed a partnership with Nemours Children’s Hospital; each month, our educators introduce science, technology, engineering, and math activities to patients in the hospital and their siblings, who are often far from home and friends. Look for more of these hands-on innovation challenges—at Hagley and in the community—in 2014.

Community engagement was also an important theme for the Hagley Library in 2013. We offered three free author talks in our Soda House auditorium, focused on popular topics such as “the color revolution” and the life of financier and entrepreneur John J. Raskob. The popularity of these talks has encouraged us to offer five presentations in 2014, and this program is likely to grow. These lectures were only one avenue through which the library connected to a burgeoning audience for its collections in the history of business, technology, and society. On-site research visits to the library increased 30 percent in 2013, and online traffic also increased more than 30 percent.

This growth in interest in the library’s collections reflects their world-class caliber—and suggests opportunities for expansion. In 2013, we received a $291,000 grant from the Council on Library and Information Resources to process the 2,800 linear-foot David Sarnoff/RCA Collection. This treasure trove of records and images will enable scholars to tell one of the most compelling stories in the history of American enterprise, innovation, and consumer culture. But even as we endeavor to bring existing collections to public attention, we are also scouring the landscape for hidden gems and accessioned several in 2013. Among them was a cache of “born-digital” documents from Sherwood Partners in California, describing the activities of high-technology startups in entrepreneurial clusters on the West coast. From eighteenth-century industry on the Brandywine to Silicon Valley startups, the library’s collections will continue to grow in step with the global evolution of enterprise and innovation.

As Hagley itself continues to evolve, we mark not only our collective achievements but the valued accomplishments of friends and colleagues who have turned new chapters in their lives. Geoff Halfpenny, my predecessor as executive director, retired in 2013. Those of you who know Geoff (and he is held in high regard by so many in this community) know that he cherishes Hagley and served it with great distinction during his tenure, laying a foundation for bright days to come. I wish to express my gratitude to Geoff, and to interim director Barbara Benson, for their exemplary stewardship of this great institution and for helping to chart the path that we will follow in the years ahead.

With best wishes,

David A. Cole
Executive Director
Hagley thanks all of our donors for their generosity and kindness. Your support is greatly needed and genuinely appreciated. The following is a consolidated list which includes Hagley Benefactor, Patron, and Sponsor members, Corporate members, Hagley Annual Fund donors, Residence Fund donors, those who have included Hagley in their estate plans, and other individuals, businesses, and institutions making financial or in-kind contributions in 2013.

We strive for accuracy in our donor listings; names appear as the donors have requested. Please contact the development office at (302) 658-2400 with any changes or corrections.
NatureFest gave visitors the opportunity to celebrate the science and beauty of the natural world with fun, hands-on activities for families.
Hagley welcomed two masonry interns from the American College of the Building Arts in Charleston, South Carolina, to assist with roll mill preservation and the Millwright Shop turbine project. Sam Friedman and Charles David Schuler, first-year students at the college, worked under the supervision of Hagley’s mason, Jeff Fisher.
Hagley’s exhibition, “Fashion Meets Science: Introducing Nylon” shows how nylon revolutionized the fashion industry and influenced how people have dressed since its launch in 1938 by the DuPont Company. The exhibition is extended through January 25, 2015, and is sponsored in part by Lyons Companies and W. L. Gore & Associates, Inc.
In 2013, Hagley celebrated the 200th anniversary of the powder yards.

Photo by Ashley Schroeder
During Bike and Hike, visitors enjoyed relaxing summer evenings by the Brandywine.
The 2013 Car Show featured American manufacturers’ high-performance cars. Visitors also enjoyed a pedal-car course, video racing, and a jukebox display.

Photos by Ashley Schroeder
The financial statements of Eleutherian Mills—Hagley Foundation are audited annually by Cover & Rossiter, Certified Public Accountants. Statements are available from the Finance Office on request.

<table>
<thead>
<tr>
<th>ASSETS</th>
<th>2013</th>
<th>2012</th>
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<tbody>
<tr>
<td>Current Assets:</td>
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<td>Cash and cash equivalents</td>
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<td>Accounts receivable</td>
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<td>Grants receivable</td>
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<td>Pledges receivable</td>
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<td>Inventories</td>
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<td>Prepaid expenses</td>
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<td><strong>Total Current Assets</strong></td>
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<tr>
<td>Noncurrent Assets:</td>
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<td></td>
</tr>
<tr>
<td>Investments, at market:</td>
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<tr>
<td>Endowment*</td>
<td>138,534,951</td>
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<tr>
<td>Other</td>
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<td><strong>Total Investments</strong></td>
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<td>Pledges receivable</td>
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<td>Split interest agreement, at market</td>
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<td>1,828,167</td>
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<tr>
<td>Land, buildings and equipment, net of accumulated depreciation</td>
<td>17,520,763</td>
<td>18,166,088</td>
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<tr>
<td>Artifacts, exhibits, and models</td>
<td>-</td>
<td>-</td>
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<tr>
<td><strong>Total Noncurrent Assets</strong></td>
<td><strong>162,593,236</strong></td>
<td><strong>149,272,384</strong></td>
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<tr>
<td><strong>TOTAL ASSETS</strong></td>
<td><strong>$164,971,308</strong></td>
<td><strong>$150,635,361</strong></td>
</tr>
</tbody>
</table>

| LIABILITIES AND NET ASSETS | | |
| Current Liabilities: | | |
| Accounts payable and other liabilities | $97,049 | $133,197 |
| Accrued expenses | 77,949 | 33,688 |
| Deferred revenue | 71,140 | 65,332 |
| **Total Current Liabilities** | **246,338** | **232,217** |
| Noncurrent Liabilities: | | |
| Accrued post-retirement benefits | 115,626 | 129,894 |
| **Total Liabilities** | **361,764** | **362,111** |

| NET ASSETS: | | |
| Unrestricted: | | |
| Board designated for long-term investment | 105,148,736 | 94,891,410 |
| Other unrestricted | 20,199,755 | 20,267,509 |
| **Total Unrestricted** | **125,348,491** | **115,158,919** |
| Temporarily restricted | 16,091,231 | 12,449,467 |
| Permanently restricted | 23,169,822 | 22,664,864 |
| **Total Net Assets** | **164,609,544** | **150,273,250** |
| **TOTAL LIABILITIES AND NET ASSETS** | **$164,971,308** | **$150,635,361** |

*Some investment funds totaling $12,042,560 are reported here at 9/30/13 market values due to timing of the 12/31/13 investment reports.

- Photo by Ashley Schroeder

Dogwood bloom by the millrace.
HELP SPREAD THE WORD ABOUT HAGLEY! AFTER YOU’VE FINISHED READING THIS MAGAZINE, PLEASE SHARE IT WITH A FRIEND OR DROP IT OFF WHERE OTHERS MAY ENJOY IT.