

# Streamside

Newsletter of the Renfrew Institute

## MISSION STATEMENT

“Renfrew Institute’s mission is to guide the people of the Cumberland Valley Region to become stewards of their natural and cultural worlds.”



Winter programs are happening now! Visit [www.renfrewinstitute.org](http://www.renfrewinstitute.org)

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Lochstampfor Funeral Home, Dennis L. Koons of Raymond James Financial Services, Inc., Lucinda Potter, CPA, and Patricia & Richard Shew.

## It's the People—

This issue of *Streamside* is the one with the lists. Hundreds of names of members, sponsors, board and committees, staff, interns, volunteers, consultants, colleagues, honorees and friends. And once again I am reminded of the role that all these people play in creating the success that is Renfrew Institute.

I recently read an article in *Blue Avocado*, an online magazine for non-profits. The article was titled ‘Deconstructing Sustainability,’ written by Jeanne Bell, Jan Masaoka, & Steve Zimmerman (<http://www.blueavocado.org/node/786>).

The article included lots of valuable ideas on the connections involved with strategic planning, mission and goals, program development and management and of course, financial sustainability for all of the above.

A comment submitted by a reader expressed a most important point: “...increased sustainability will come to those who see people as an equal resource to money.”—Annastasia Palubiski.

Renfrew Institute sustains its vibrant existence through the financial support of our many, many funders. Most of you reading this are part of that critical group. Without your financial contributions there would be no Institute. So yes, it’s very important.

However, each of you—whether you donate financially or not—has a part in the collective “face” of Renfrew Institute, the heart and soul of our organization. You are the ones who give countless hours of volunteer time, in-kind services and talents and skills that help our board and our professional staff to get the job done, and done well.

As you read through this issue (and remember past ones), take note of the people behind each story: an unpaid college intern who gains experience in our midst, yet contributes her own expertise and enthusiasm; the professor who jumps on an opportunity to increase Chesapeake Bay education in our middle schools, then invites Renfrew Institute to jump in too; the board member who takes the initiative to make the RI office more comfortable and efficient; the staffer who spends unpaid time to ensure that one of our elder members is remembered and contacted; the volunteer who devotes hours in preparing thousands of “small program items” to enhance each school child’s experience with us; the high school student who comes back to Renfrew with fond field trip memories along with teenage energy as a volunteer for Pumpkin Festival; the former student, now research scientist, who returns to RI to deliver a public lecture on endangered crows; the artist who designs an event logo for an RI fund-raiser that becomes the icon of the running community in Waynesboro; the children who honor our teaching staff by creating a “Renfrew” song especially for us.



*From the Desk of* MAXINE BECK, PRESIDENT

## Falling in Love with Renfrew Institute

Five years ago Ed Miller approached me in church after Sunday services and asked if I would be willing to serve on the Renfrew Institute Board of Directors. Now, Ed does so much for the community that, in spite of my other commitments, it was impossible to decline his offer.

‘Besides,’ I told myself, ‘Renfrew is a beautiful place. It might be good to get involved with it.’

My thoughts have changed somewhat in the interim that now finds me president of the Renfrew Institute board. I quickly discovered that Renfrew is an awesome place and it is priceless to have become an integral part of it.

The finely-tuned machine that has created this gem has the motors and gears of many talented and dedicated people. The board, staff and volunteers of Renfrew Institute for Cultural and Environmental Studies have sought after and achieved excellence since the first day it began operations in January of 1990.

At the risk of sounding over the top, I sincerely find myself in awe, time and time again when I witness the outpouring of support from the community and the energy of everyone involved. They consistently renew and expand the dedicated efforts that are imperative every year to maintain this invaluable asset to the community.

The interactive classes that Renfrew Institute provides to thousands of elementary and middle schoolers annually are a joy—captivating and instructive. Small wonder and welcome blessing that these programs continue to thrive, despite school budget cuts.

The lectures and workshops for adults also continue to grow and attract impressive crowds. The beautiful, new four-square garden offers something for everyone. The *Pumpkin Festival, Bay Supper, Jazz Fest, Earth Day & Festival of Art, Youth Festival* and more are stellar events anticipated by many people each year.

Is my pride in Renfrew Institute showing? I hope so, and I offer no apology for a lack of humility, just an admiration for the treasure it has become.

The Waynesboro community continues to strive to offer an inviting, progressive, enriching environment to nurture her citizens and visitors—the young and not-so-young. The enchanting facility maintained by Renfrew Museum and Park and the vast opportunities Renfrew Institute offers to make this place and the wonder of nature come alive are an integral part of this effort.

Serving as president of the Institute is truly an honor and a privilege. Now I know why clichés persist. There is simply no better way to say it. I love being an active part of Renfrew.



Maxine Beck

Maxine Beck July, 2012



Left to right: Beth Skroban, Wayne Martz, and Bob North enjoy a chuckle from one of Ed Miller's many stories about Renfrew Park. Lori Schlosser, far right, played 'chauffeur' for Ed, in the golf cart.

## Mornings with Ed

This summer, our staff, board members—and even a few friends and family members—spent time with Ed Miller out on the Renfrew Park property.

Ed worked for many years for Edgar and Emma Nicodemus, the last private owners of what is now Renfrew Museum and Park. Ed was on the scene when the farm became a museum and park, and assumed the role of the first supervisor of grounds.

He shared his memories and knowledge of the early Nicodemus years, as well as the evolution of the property into the place we now know.

After spending a delightful time with Ed, we are now even more inspired to keep the “Nicodemus Legacy” alive. Plans are also underway for Ed to share more of his stories with the public this spring.

The second *An Evening with Ed* is set for Thursday, May 16 at 7 p.m.

# Downstream

with Hannah Beker, Intern

EDITOR'S NOTE: *Downstream* is a regular column in this newsletter. It features articles about environmental awareness and action that can help us be better stewards of our natural heritage.

## INTERN REPORT

# The Impact of Marcellus Shale: An Overview

Marcellus Shale has in recent years sparked many discussions in the oil and gas industries and in the environmental communities that it affects.

Marcellus Shale contains a natural gas, which the oil and gas industries seek, hoping to increase the United States' energy independence. Drilling for Marcellus Shale affects the U.S. economy in both positive and negative ways, as well as causing environmental impacts.

Marcellus Shale is a geological shale formation containing natural gas that was trapped within it at the time of its formation. Due to its structure, it is a candidate for hydraulic fracturing to obtain this important energy resource.

Pennsylvania is one of the states through which Marcellus Shale extends, running across most of the state except the central and southeast regions. However, Marcellus Shale uses and implications affect the entire state.

This article will provide a brief description of natural gas, Marcellus Shale geology, hydraulic fracturing, and the water quality impact of this process.

### What is Natural Gas?

Natural gas is being used in the United States as one of today's energy sources. Its use strengthens domestic energy independence for the U.S. The question, however,



is what is natural gas, and why is it being used instead of another energy source?

Natural gas is a combustible mixture of hydrocarbon gas, which is an organic compound consisting of carbon and hydrogen. The gas is primarily formed from methane and can include ethane, propane, butane and pentane.

Natural gas is a fossil fuel like oil or coal. It developed millions of years ago from plants, animals and microorganisms.

Natural gas is found underneath the earth's surface. In its purest form, the gas is colorless and odorless. Natural gases are combustible and emit lower levels of potentially harmful byproducts into the atmosphere when burned than certain other fossil fuels (such as coal, for example). For this reason, natural gas is said to have a 'clean burn.'

Because natural gas offers a clean burn, it is used as an energy alternative to coal, another resource abundant in the U.S. Natural gas creates a great amount of energy with few emissions and has many advantages as an energy source.

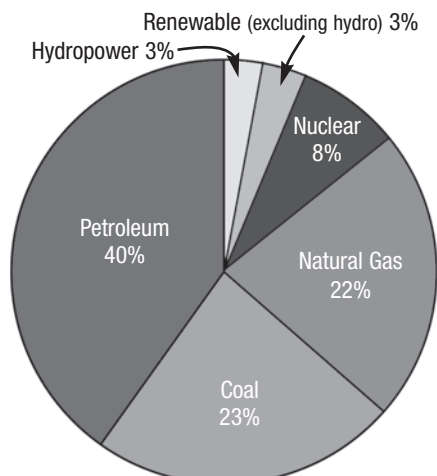
Natural gas is replacing other fuels because it helps reduce greenhouse gas emissions, smog, acid rain and water pollution, and its burn produces no solid waste.

Based on our present understanding of natural gas reserves available in the United States, natural gas can continue to supply energy for the next several decades. Currently, natural gas accounts for 22% of the total energy consumed in United States according to U.S. Department of Energy (DEP).

A DEP chart (*bottom left, this page*) shows the distribution of current energy sources in the U.S.

An abundant source of natural gas has been discovered in Pennsylvania, in the Marcellus Shale formation.

U.S. Department of Energy chart shows the distribution of current energy sources in the U.S.



(continued on pg. 16)

## Recycle Reuse Yard Sale Fundraiser—A very good year!

Renfrew Institute's 7th Annual Recycle Reuse Yard Sale Fundraiser was the most successful in years, raising almost \$2,800 in support of school programs and public events!

Such a large gathering came together on that pleasant day in April that the lots around the park became quite full...what a great problem to enjoy!

We have a big enthusiastic group of devoted volunteers who help make this event possible. They erect canopies, paint yard sale grids, bake and deliver delicious food, grill hot dogs, deliver donated items, move tables, direct traffic, sell food, brew coffee, assemble ploughman's lunches, sell yard sale goodies—and of course, we must acknowledge those who provided sponsorships!

This annual event is gaining in popularity, and a continued partnership with Earth Day activities permits us to share the celebratory day as well as the organization's resources. Thirty vendors (compared to 26 last year) displayed their "treasures" and reported brisk sales.

Thanks to all who helped to make the event a success. **Antietam EYE Associates'** role as lead sponsor provided an important boost to the bottom line. Other sponsors

who have been on board since the first Recycle Reuse Yard Sale include **Advance Auto Parts**, **Dru's Books N'Things**, and **Total Vac**. And thanks to additional 2012 sponsors including: **Sterling Financial Management** and **Hadley Farms Bakery**. Local businesses were very generous, donating apples (**Rinehart Orchards**), hot dogs (**Johnnie's**), hot dog rolls (**Martin's Food Stores**), doughnuts (**Krumpe's**), cocoa and peanut butter (**Food Lion**), pizza (**Frank's Pizza**), cinnamon rolls and croissants (**Hadley Farms Bakery**) and organic fair trade coffee (**Port City Java**).

We also send a shout out to all those, including board and staff members, who helped bake pita bread and assorted goodies, and donated sodas, bread, and ice. Yes, when it came to feeding our patrons and our vendors, we had quite a variety and plenty of delicious food available!

Board and staff members also donated good used items for the sale table.

Events such as this just don't happen without the efforts of many. We extend gratitude to all who contributed to this year's great success and urge you to mark your calendar for April 27th so you can join us this Spring!

Phil Kelly, Recycle Reuse Yard Sale Committee Member



## Get Ready For the 8th Annual "Recycle/Reuse" Earth Day Yard Sale

**SATURDAY, APRIL 27 • 9 AM-3 PM**

Mark your calendars for the 8th Annual Earth Day Recycle/Reuse Yard Sale on Saturday, April 27.

Rent a space for yourself, your family or your organization. Spread the word to help the Institute raise funds through space rentals and don't forget to come to the sale to find great bargains!

Spaces are available for \$15 each, double spaces for \$25 and triple spaces for \$30.

Each space accommodates an 8-ft. table or two card tables.

**FOR MORE  
INFO—CALL US  
AT 762-0373!**

**BAKED GOODS  
& BEVERAGES**

**HAVE LUNCH IN  
THE PARK!**

**JOIN US FOR THIS  
FUN EVENT!**

**YUMMY  
FOOD  
ITEMS  
FOR SALE**



Above: Timothy Forsythe, right, found a great bargain on a telescope at Renfrew Institute's yard sale table. Sandy Beaumont, left, worked the table along with other institute volunteers.



Bargain hunters crowded the displays of treasures along the walkway, making 2012 one of the most successful Yard Sales yet!

## Cultural Currents

with Sherry Hesse

EDITOR'S NOTE: *Cultural Currents* is a regular column in this newsletter. It features articles about past ways of life in our area, and strives to help us better understand our cultural heritage.

### You Are The Apple of My Eye

Recently, I had the unexpected pleasure of meeting my sister-in-law, nephew and niece for lunch while they were in town to visit their Grandma. As we ate, we talked about the things that families do: when another nephew is leaving for the Army, vacation plans, and the date of "Apple Butter Weekend."

#### Making Apple Butter

Each autumn our extended family gathers to make apple butter the old-fashioned way. Our hosts (my husband's sister and her family) work hard to prepare for this festive gathering at their home in Virginia.

My brother-in-law brings the antique kettle out of the basement. The kettle is cleaned, firewood is gathered, food is prepared, and sleeping arrangements are made for out-of-town family (like us).

And, of course, apples from a nearby orchard are readied for the apple butter kettle. Each contributing family brings apples to supplement the pot, along with canning jars and a pot-luck dish.

#### Reviving a Family Tradition

Making apple butter is hard work, and for about 20 years we took a break from the arduous task. Then a few years ago, my adult nephew and niece resurrected the tradition, and we gather annually again for a task that is older than our family's long tradition.

Some of us take the job more seriously than others. Personally, I give the kettle a few ceremonious stirs with the long wooden paddle (described in one colonial account as resembling a hoe with holes in it) and call it my contribution.

I prefer not to get up before dawn to light the fire—instead I play with the younger nieces and nephews, visit with old family friends whom I only see at this event, and simply relax in the shade of the oak trees.



#### Apple Country

In the past, apple butter making was not only a time for gathering with family and neighbors, but a necessary part of the job of providing the family with food for the winter. Of course, all types of food preservation were important to our ancestors, including butchering, preserving garden vegetables and other fruits.

Many of us today continue to "put up" or can and freeze the fresh bounty of the season. Apples were, and still are, an important foodstuff.

Here in South-Central Pennsylvania, we live in the heart of apple country. We are surrounded by orchards, enjoy the lovely 'apple blossom time' in spring, attend apple festivals, and of course, eat apples.

We are lucky to have any number of fruit markets nearby where we can purchase a great variety of fresh apples in season. We even live near the National Apple Museum, dedicated to preserving the apple industry's history, in Biglerville, Pa.

#### Apples in History

Apples hold an important place in history worldwide. Remains of apples have been found in the sites of prehistoric Swiss lake dwellers. Europeans ate apples for many, many centuries, and it was European colonists who planted European apple trees in the New World.

The crabapple is the only apple native to North America. However, by the early 1700s apple orchards were common on farms in this country, and 7,000 varieties of apples now grow in North America. The colonial name for



*This illustration by Florence White Williams shows an idealized colonial scene with a young girl busily peeling a bushel of apples while her mother prepares empty jars in preparation for homemade applesauce or apple butter.*

(continued on page 10)

## 2012 Bay Supper Fundraiser Yields \$12,000!

The 15th Annual Chesapeake Bay Supper fundraiser was held on June 22, 2012 at the Waynesboro Country Club (WCC). It was a whopping success with close to 200 attending! Below are the listings of sponsors, patrons, planning committee members, volunteers and food providers that made the whole thing possible.

The dinner and auctions netted \$12,000, again making this top fund raiser critically important for keeping the wheels turning at Renfrew Institute! Mark your calendars for the next Supper—**Friday, June 21, 2013!**

*A special note of appreciation:* Sincere thanks to our departing Bay Supper chairman, **Allie Kohler**, whose event leadership and yearly appearance at the microphone as emcee has been such a gift to us. And to his wife **Jo Ann** (also stepping down) who handled all the arrangements with WCC over many years, we express our sincere gratitude. Best wishes to you both!

We are pleased to announce that Matt Gunder, RI board and Bay Supper committee member, will take the helm for 2013. Thanks for stepping up, Matt! Planning will get underway in February. We will roll out all of the fun of past suppers and may even throw in a new surprise or two! ~*Melodie Anderson-Smith, Executive Director*

### *Thank You to everyone who supported the supper:*

#### EVENT UNDERWRITERS

West Penn Power, a FirstEnergy Company  
State Farm Insurance Co. "Good Neighbor Grant" through  
retired agent, Joann Hersh,

PRINTED PROGRAM UNDERWRITER  
Chet & Betsy Mauk

#### SPONSORS

Advanced Financial Security, Inc.  
Denny's Garage  
Debi & Greg Duffey  
Foreman's Rare Coins  
Noelker & Hull Associates, Inc.  
Savage Family Pharmacy, Inc.  
Dr. Ronald & Louise Shultz

**TODAY'S HORIZON FUND CONTRIBUTORS –**  
*APX Enclosures, Inc.; The Carolyn Terry Eddy Family;*  
*Carolyn, with daughters Connie Fleagle & Kim Larkin;*  
*and The Nora Roberts Foundation*

#### PATRONS

Clint & Amy Barkdoll	Richard & Joann Hersh
Garrett Blanchet	Marge Kiersz
& Elena Kehoe	Krepps Dental Studio
George & Marty Buckley	Lynn MacBride
Frank & Susan Conway	Wayne & Debbie Martz
Greg & Debi Duffey	Ed & Ann Miller
Barbara Gaydick	Mr. & Mrs. Patrick Minnick
Steve Graham	Cheryl & Kenneth Plummer
Steve Graham for	Pat, Gary & Tracy Radtke
Cassie & Spencer Cooper	Dave & Tawnya Secor
& Missy Johns	Patricia & Richard Shew
Hamilton Nissan for	Eunice Statler
Cathy & Terry Kline	John Stauffer
Jay & Pat Heefner	Angela Grove Weagly
Carol Ann Henicle	Rebecca Wertime
Jackie Henicle	Bob & Linda Zimmerman

#### SILENT AUCTION DONORS

Eve Adkins~	Mary Ellen Selvaggio
Garden Path Pottery	~Peace by Piece
Bob & Shelly Benchoff	Anne Shepard
Delaney Blubaugh	Eunice Statler
Kimberly Camp-Hall	Waynesboro Country Club
Nancy & Max Creager	Waynesboro Hospital Gift Shop
Barb Channing	Angela Grove Weagly
Sandy & Harry Fisher	Judith Winfrey~
Steve Graham	Winfrey Creations
Green Arbor Flower &	<b>LIVE AUCTION DONORS</b>
Shrubbery Center	Rob Beaumont
Greencastle Golf Club	Wayne Driscoll~
Virginia Hair	Custom Sign Studio
Jay & Pat Heefner	Joann & Dick Hersh
Carol Henicle	Karen Manderson
Keeney Fire Extinguisher	Debbie & Wayne Martz
Service, Inc.	Nemacolin Woodlands Resort
Elena Kehoe~	Cheryl & Ken Plummer
Gentle Laser Skin Care	James Smith
Lisa Kline~Nu Vogue Hair	Addie Tomei~Savory Sojourns
& Tanning Salon	Bill Van Gilder
Scott Lux	<b>HEADS/TAILS DONORS</b>
Lynn McBride	Annapolis Waterfront Marriott
Tom McFarland	Antietam Dairy
Ann & Ed Miller	Aqua 103 Restaurant
Misty Meadows Creamery	Bogard's Hair Salon
Bonnie Monk	Tom Boock~The Cottage
Joe Rock~	Ft. Ritchie Community Center
The Antique Flower Pot	Holly Inn Group, Inc.
Laura Rock	Totem Pole Theatre
Patric Schlee~	Zoë's Chocolate Company
Earthsong Windchimes	

### *And...A huge THANK YOU to these planning committee members & their helpers:*

*Event Chair & Emcee:* Allie Kohler

*Auctions:* Joann Hersh (Chair), Carol A. Henicle, Dick Hersh, Pat Radtke

*Heads & Tails Game:* Allie Kohler

*Food & Arrangements:* Jo Ann Kohler (Chair), Waynesboro Country Club—Executive Chef Colin Snyder, Roberta Harner & Staff

*Invitations:* Eunice Statler (Chair), Shirley Faith, Barbara Gaydick, Pat Heefner, Jo Ann Kohler, Red Mohn, Angela Grove Weagly, Linda Zimmerman, Janet Zook

*Reservations:* Pat Heefner (Chair), Debi Duffey, Linda Zimmerman  
*Set-up/Decorations/Auction Floor Helpers:* Debi Duffey, Matt Gunder, Jo Ann Kohler, Jason Levick, Debbie Martz, Wayne Martz, Red Mohn, Pat Shew, Eunice Statler & Linda Zimmerman (Set-up Organizer)

*Window Dressing:* from the Duffey, Hersh & Kohler gardens  
Balloon Helium Courtesy of Jonathan Ingels, Eichholz Flowers, Waynesboro

WASH All-School Production (2007) "Seussical" Fish  
created by Sue Kuhn & Angie Minnick

#### *Event Underwriters*

**WestPenn Power** &  
A FirstEnergy Company



*Special Thanks* to auctioneer, Jerry Scruggs,  
for donating his services for the live auction

Appreciation to Dave & Jane's Crab House, Fairfield, Pa.,  
for procuring, preparing and delivering the crabs

Thanks to Steve Graham for providing the littleneck clams

## Renfrew Institute is Pleased to Announce New Underwriting Support

Though the economic landscape continues to challenge the non-profit sector, we are privileged to announce new support from several area businesses and organizations.

### Salamander Scramble Welcomes New Sponsors



The giant salamander lives in mountain streams and lakes, and can grow up to six feet long. It has four digits on its front legs and five digits on its back legs and is covered with a slimy protective mucous. It spends most of its time walking on the river bottom, though it can swim quickly. On land, its small legs won't carry it and it must drag itself along.

Contrast this with Renfrew Institute's Team Salamander of Salamander Scramble 5K Fundraiser fame. Team Salamander continues to move toward "giant stature" with 134 legs (67 team members, with two legs each!) that move this salamander over land at a pace that ranges from a 3.1 mile full out sprint, to an admirable 5K amble. [See article on pages 12-13.]

Aside from the Hellbender, which grows to a length of 20 inches, Team Salamander is the only giant salamander native to North America!

One important factor in the team's continued growth is the arrival of new sponsorships from generous members of our local business community. New sponsors for our 2012 event include **Grove-Bowersox Funeral Home, R. Thomas Murphy & Associates, P.C., Cornerstone Family Dentistry and Eichholz Flowers.**

Thanks to each of these businesses, the fundraiser's bottom line enjoyed a considerable boost.

Sponsorships provided resources that enable us to nurture team members with "goodies" and prizes on race day at team headquarters, while also contributing to the fundraiser's net income, which is used to underwrite institute activities throughout the year.

As the institute strives to fulfill its giant mission while maintaining excellence in the programs and experiences it provides to the community, new sponsorships like these are vital ingredients in 'keeping the giant fed!'

### Jazz Fest Receives New Sponsorship Support

Those who attended Renfrew Institute's 21st annual Jazz Fest were treated to an experience described as amazing, supremely special, silken sounds...the soulful, resonant vocals of renowned jazz singer René Marie, accompanied by her fellow musicians, wowed the crowd completely.

Newly enlisted in helping to provide this arts experience for an appreciative public is **The Orchards Restaurant.** Established in 1995, the restaurant is located in Chambersburg on the site of a former apple orchard.

It has been operated since 2001 under the leadership of third generation family members Mike, Nick and Charles Kalathas. All are graduates of The Culinary Institute of America, one of the finest culinary institutes in the United States.

With seating capacity of 160, The Orchards offers fine dining for lunch and dinner. A ballroom with a capacity of 400



*Internationally renowned jazz singer, René Marie headlined this year's Jazz Fest. The event was sponsored in part by The Orchards Restaurant.*

is available for special gatherings, while its lounge facility provides a casual alternative. Private dining rooms are available for more intimate gatherings.

Diners have used superlatives equal to those describing René Marie's performance in speaking about The Orchards' menu selections.

We're grateful for this new partnership that nourishes the institute's ability to deliver world-class live jazz in our own community.

### Trail of Trees Experience Receives New Sponsor Support

Put your heel to the ground on any of Renfrew's woodland nature trails during the month of October and you're sure to be reminded of the arrival of autumn. A stunning display of colored foliage hangs in an overhead canopy. Vibrant hues of red, yellow and orange stud the earthen paths as fallen leaves accumulate on the forest floor.

By November, the stream that once reflected those glittering autumn jewels reflects bare branches as plant life in the park prepares for the coming winter.

These are some of the same observations made by third grade students who visit the *Trail of Trees* as part of the institute's school program series. Underwriting support for this program from *two* new business partners permits the institute to maintain modest student fees for those who participate in school programs.

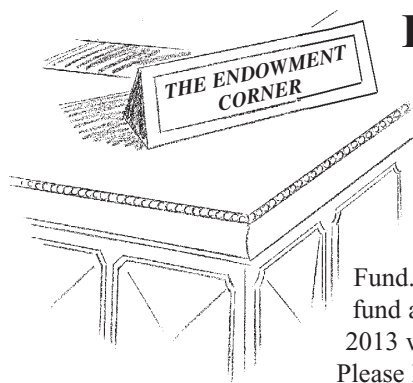
**Bartlett Tree Experts** has adopted the *Trail of Trees* program, with an enthusiasm for helping young naturalists learn about tree science related to seasonal changes. Students learn about important tree uses (shelters, food sources, hiding places, soil enrichment from decomposing plant material...) in the natural world, as well as

*(continued on page 14)*

# gifts

## NEW Sponsorships

by Tracy Holliday, *Grants Administrator*



## Endowment Update—

Renfrew Institute's members and friends have continued to support the growth of our Endowment

Fund. The value of the fund as of January 22, 2013 was \$176,782.

Please keep Renfrew

Institute in mind for this year and, if possible, put a few dollars aside for this fund again. RI members received a supplemental giving request in December 2012. Contributions are welcome year round. Please make your check payable to Renfrew Institute (memo "endowment") and send to: Renfrew Institute, 1010 E. Main St., Waynesboro, PA 17268.

For more information, please call our office at 717-762-0373 or email us at [info@renfrewinstitute.org](mailto:info@renfrewinstitute.org).

Our sincere thanks to the following who made donations since the last *Streamside* listing:

Mike & Denise Beck	Karen & Walter Manderson
Mr & Mrs. Otis Brown	Martz Plumbing, Heating & AC
Kenton Broyles	LeRoy S. Maxwell
Martha & George Buckey	Lynn MacBride & The
Dr. & Mrs. Max E. Creager	Wed/Thurs Bridge Club
Col. & Mrs. Dan DeDona	Marilyn K. McCarney
Greg & Debi Duffey	Bev McFarland
Paul & Barbara Dunlap, Jr.	Tom McFarland
Barbara Gaydick	Ed & Ann Miller
Steve Graham	Bonnie Monk
Kathy Helfrick	Tim Parry
Vicki Hess	Betsy Payette
Millie & Blaine Holliday	Jon Pearson & Pat Gaffney
Tracy Holliday	Bill & Debbie Pflager
& Kevin Ledden	Mary Ellen Selvaggio
Melissa Graham Johns	& Patric Schlee
Bill & Kathleen Kaminski	James Smith
Elena Kehoe	& Melodie Anderson-Smith
& Garrett Blanchett	Eunice Statler
Phil & Donna Kelly	Dr. & Mrs. Earl O. Strimple
Mike Mahr	Kathryn M. Tryon
& Mary Ashe-Mahr	Angela Grove Weagly

*Gifts were made to the Endowment Fund in memory of Willard Rahn*

*by the following:*

Marie & Ed Beck

Steve Graham

Eunice Statler

Rebecca Wertime

Bob & Linda Zimmerman

*An Endowment Fund gift was given in memory of Willard Rahn and in memory of June Anderson by John & Martha Dudley Keller*

## Music to Our Ears

The following comments were written by Endowment Fund donors on back of donor cards in response to the question,

"Why did you contribute to the Institute's Endowment Fund?"

*"I lived in the Waynesboro area for 28 years. It is important to recognize and preserve local history. I have many fond memories of my days in Waynesboro. Future generations should learn to appreciate their heritage through the programs available at Renfrew. Hopefully for many years to come these programs will be available."* ~**Vicki Hess**

*"I have been a part of the wonderful environmental education for children. I have seen the benefits to our young children. I want it to continue."* ~**Kathy Helfrick**

*"For 10,000 future environmentalists."* ~**Steve Graham**

*"Being and sharing with nature is so good for the soul."* ~**Blaine Holliday**

*"I give to the endowment fund because I believe the Institute is the second best gift to the Waynesboro area and beyond, the first being the gift of Emma Nicodemus and Hazel Geiser...Renfrew Museum and Park. Whenever children are involved the continuation into the future is increased tenfold....the future is dependent upon our children and what they are taught. Keep up the good work. Love you all."* ~**Ed Miller**

*"The Renfrew Institute continues to be the icon of commitment to the Waynesboro community and beyond."*

~**Dr. & Mrs. Max E. Creager**

*To the inspiring teachers and writers and developers of Renfrew Institute—*

*It is our pleasure to support and encourage the teaching, learning, developing awareness, and knowledge of the natural world for our community's young minds and hearts.*

*Renfrew Institute...may it continue to encourage our community's children to walk our forests, to use our senses and encourage our curiosities, and sense of wonderment for many generations to come!*

*Thank you for your important work promoting the health of 'Vitamin N' for Nature within such a complex world. Our children are so very precious—thank you for what you do for them!"* ~**Mary Ellen Selvaggio**

*Thanks...  
for helping  
us grow.*





## Pumpkin Fest 2012 a Success!

Renfrew Institute and Renfrew Museum joined hands once again to present another successful Pumpkin Festival on Saturday, October 20, 2012. The event drew approximately 1,000 people.

The pumpkin-launching trebuchet was absent this year due to the need for major repairs. However, new activities for children including a ball launcher and kiddie pool corn play were big hits.

Scarecrow making, corn necklaces, face painting and hayrides kept everyone busy when they weren't eating, or carving pumpkins. The Boro Boogie Pickers provided lively bluegrass music.

Proceeds totaled nearly \$7,000 to be equally split between the institute and the museum. Both organizations express deep gratitude to all who helped to make the day so enjoyable for everyone and so beneficial for our Renfrew programs. [see volunteer list, page 36]

Special thanks to **Debbie Pflager** who is stepping down as co-chair. Debbie has been dedicated to Pumpkin Fest, along with the Corn Maze and Haunted Farm productions of a few years ago, giving energy, enthusiasm and countless hours of leadership work every year. Debbie was brought on stage and presented with flowers during this year's event.

We are pleased to announce that RI president, Maxine Beck will co-chair in Debbie's place for 2013, joining the museum's co-chair representative, David Hykes who is also vice president of Renfrew Committee, Inc.

## It's the People *continued from page 1*

The *people* of Renfrew Institute make us what we are. They cheer us and cajole us, they tease us and then offer suggestions, they pitch in and they lift up, they lead us and they inspire us, they learn and they share. Together we offer each other (and the entire community) programs and activities that add immeasurable quality of life for everyone.

Much gratitude to all of you...the people of Renfrew Institute. And best wishes for the new year!

Melodie Anderson-Smith



*Debbie Pflager, left, with Pat Heefner and Anne Shepherd, enjoys a laugh at the Pumpkin Festival food concessions table. Debbie is stepping down from her long-time position as institute co-chair of the event, which drew 1,000 visitors this year.*

## Patric Schlee Receives Environmental Artistry Award



*Presented with a kiss...Patric Schlee received the 2012 Environmental Artistry Award along with a kiss from Becky Dietrich during Earth Celebration Day in April.*

Patric Schlee was honored as the recipient of Renfrew Institute's 2012 Environmental Artistry Award during Earth Celebration Day & Festival of Art on Saturday, April 29, 2012.

Local artist and historian, Becky Dietrich presented the award and gave a beautiful tribute to her friend Patric for his contributions to the world of art and music in our area. She invited Patric to perform on his silver flute before presenting him with a framed certificate announcing his award.

Patric, founder of his own business, EarthSong, lives with his wife Mary Ellen Selvaggio in South Mountain, Pa. He is well known for his beautifully hand-crafted musical instruments, most notably his wind chimes. Impeccably tuned to the chords of an ancient pentatonic scale, Patric's chimes "sing" with exceptional clarity and tonal quality.

Patric's other original designs include: chime harps, flutes, didgeridoos, wood and metal sculptures, and mobiles. Patric performs on drums, didgeridoo and flute and plays improvisational music with other musicians at monthly jams. His belief in the connection of nature and the arts instructs much of his creative work. He is currently working on a CD of earth songs: bird song, toad song, surf, and wind in bamboo mixed with instrumentals to be ready for his spring shows including the institute's Earth Celebration Day and Festival of Art 2013 at Renfrew Park.

Renfrew Institute joins the community in honoring Patric and in thanking him for contributing his beautiful and inspiring musical art to our lives.

***Congratulations Patric!***

## Apple of My Eye *continued from page 5*

apple is ‘winter banana’ or ‘melt-in-the-mouth.’ Apple trees belong to the rose family.

### Cooking with Apples

In the Mid-Atlantic region, apple dishes come from both English and Pennsylvania German traditions. Historically, along with eating apples fresh or dried, apples were pressed into cider, made into vinegar, applesauce, apple butter, marmalade, soup and used to create a variety of pastries, cakes, pies and puddings.

The index of the *Mennonite Community Cookbook* (a personal favorite of mine) lists more than 30 recipes using apples, ranging from pies and cakes to chutneys. There are even recipes for delicious desserts with unusual names, like Apple Grunt and Apple Goodie.



*Mason jars of yummy apple butter can be enjoyed all year long, great for use in cooking or baking, or eaten right from the jar.*

The historic cookbook, *Pennsylvania Dutch Country Cooking*, includes a recipe for something called an Apple Slump, in which apples are baked in a casserole with a crust on top. (Some of you may know just what these dishes are, and not find the names strange at all!)

And who doesn't love sweet apple desserts? A Schnitzglaafdi (clafy pudding) is a batter pudding that looks like a cake when it is removed from the oven.

The delightful-sounding Apple Puffs were a popular Pennsylvania German pastry. Apple dumplings were an important part of Mid-Atlantic folk cooking, and were a blend of English and German cuisine. Boiled apple dumplings were served frequently.

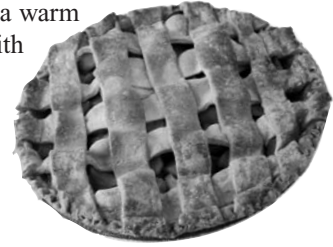
### Not Just Desserts

Although they originated as a medieval dessert, in the 1700s and 1800s in North America, dumplings became an evening meal in themselves. (One of my



*Freshly baked apple dumplings are a popular dessert even today—and may even be enjoyed as an evening meal!*

father's favorite suppers is a warm apple dumpling covered with milk.) Apple fritters also originated in medieval times as a dessert, found their way into American cooking, and were often served at holidays.



Many foods of Pennsylvania German origin combine sweet and salty flavors. [The sweet and salty dishes remind me of the pork and sauerkraut cooking in my Crockpot as I write this. This evening I will serve it with sweet applesauce.] This type of food dates back to the Middle Ages (or possibly before) in Europe.

One such Pennsylvania German dish was called Schnits un Gnepp, a stew of dried apples, ham and dumplings. It was a typical one-pot meal. In later years, the individual components came to be served separately. For example, first the soup course was served, followed by the roast.

Other traditional apple dishes include Griene Ebbbrei, or green apple pap, which was used as a relish with chicken. (A pap is any soft food resembling a puree.) Apple soup was a typical winter soup. It was made with apples, wine, egg yolks, a bit of cinnamon and sugar, and was served over slices of bread fried in butter. Yum! There was even cider soup, served on apple pressing day.

### Storing and Preserving Apples

But let's back up a bit. In order to enjoy all this delicious food, early settlers had to preserve their apples for the winter. Whole apples could be kept fresh by storing them in a cool outbuilding. As long as severe weather did not threaten to freeze the apples, they could stay in an outbuilding. As cold winter weather approached, they were transferred to a cellar or cool attic. Apples were often stored in barrels or boxes, sometimes packed in dry straw or sand.

Cider-making was important on early American farms. By the 1700s when apple orchards began to yield, cider became a common beverage. Cider was either pressed on the farm, or at a communal cider mill and press. Cider was stored in barrels and consumed in large quantities by the whole family.

“Prime” or hard cider was over a year old and even the children drank it. If it was mixed with honey, it became a strong, sweet drink called ‘metheglin.’ Some of the cider was made into vinegar, another important foodstuff.

### Busy Bees

On many occasions the farm community came together to work on tasks necessary for survival. Such gatherings were often called “bees,” and they helped to get large amounts

*(continued on page 11)*

## Apple of My Eye *continued from page 5*

of work done, as well as providing a social outlet. Gatherings were held for things like butchering, flax processing, barn raisings, cider making, and anything that many hands made easier to accomplish.

Apple bees were held to peel apples for drying, as well as for use in making apple butter. For drying, apples were cut in rounds, strung on threads and hung up in a dry place, much like drying vegetables such as beans.

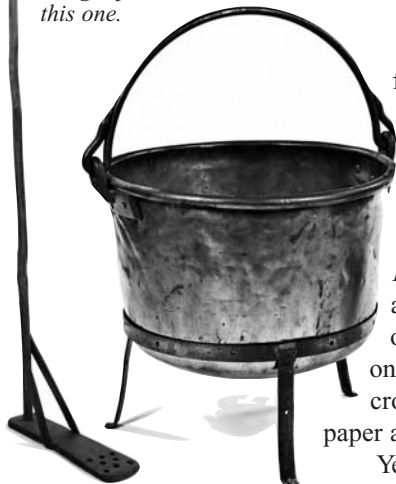
Dried apples, or Apple Schnits, were a staple on the farm. They were popularized by the Pennsylvania Germans and are still common in Pennsylvania. Dried apples can be traced back to early European cooking, and were used in traditional English cooking as well. Many old recipes call for dried apples.

Dried apples are tasty eaten just as they are. Caution is in order, however. My sister-in-law asked me to warn my readers not to eat too many dried apples at once, and then drink a lot of water. The dried apples will expand, just as they do when soaked in preparation for baking. This will cause a stomach-ache!

### Apple Butter Traditions

Making apple butter was another typical event that combined work, community and fun. Apple butter was traditionally made in a large copper kettle hung over an open fire. It required constant stirring so it would not burn. A community event made that hot job more fun!

*A large copper kettle of the type typically used for making apple butter. Apples and other ingredients are cooked over a flame, and the steaming mixture must be stirred constantly, using a paddle with holes in it, like this one.*



Many old apple butter recipes call for large quantities of ingredients. One recipe (*The Open Hearth: A Colonial Cookbook*) calls for 32 gallons of fresh cider, three bushels of apple schnits, and 50 to 60 pounds of sugar. Another account (*Keeping House*) tells of making as many as 30 gallons of apple butter at once. It was poured into crocks, covered with paper and stored.

Yet another old recipe (*A Quaker Woman's*

*Cookbook*) cautions the cook not to store apple butter in "earthen vessels," and instead to use "stone jars." The acidity of the apples apparently reacted with the glaze to create a poisonous combination.

In Europe, plum and pear butters were more common than apple butter. Here in this country, where apples were more readily available, apple butter became

a well-known Pennsylvania German food. It was often served at every meal. At one time, apple butter flavored with fennel was common in Pennsylvania German cooking. The anise-like flavor made it tasty with rye bread, another favorite food.

### Apples and Folklore

Given the long history of apples, it is not surprising that apple folklore and tradition abound. Apples are often part of fairy tales and other old stories. Snow White ate a poisoned apple. William Tell shot an apple off his son's head.

An old English tradition is Apple Wassailing, to bless the apple trees for a good harvest. A new holiday is Apple Day, begun in England in 1990.

Let's not forget Johnny Appleseed, a real person named John Chapman. In the 1800s he traveled around the United States planting apple trees.

And think of these familiar sayings:

*An apple a day keeps the doctor away.*

*As American as apple pie.*

*The apple of my eye.*

*Comparing apples to oranges.*

*One bad apple spoils the whole bunch.*

This season, carry on the tradition of eating apples, enjoy the health benefits of apples, and savor some of our locally grown fruit.

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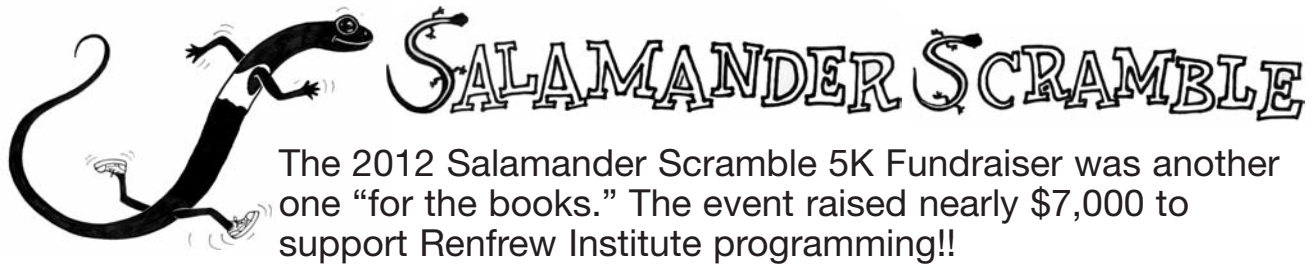
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### "JOHNNY APPLESEED"

*For decades John Chapman cultivated thousands of acres of apple orchards across three states. The largest of Chapman's nurseries contained over 15,000 apple trees, a gigantic enterprise even by the standards of today's mechanized agriculture. Only after his death did artists and writers transform John Chapman into the legendary "Johnny Appleseed."*



# SALAMANDER SCRAMBLE

The 2012 Salamander Scramble 5K Fundraiser was another one “for the books.” The event raised nearly \$7,000 to support Renfrew Institute programming!!

On a near-perfect day, weather wise, the 5th annual Salamander Scramble was held in conjunction with the annual Waynesboro Jubilee Firecracker 5K on July 4, 2012.

This year’s team consisted of 67 members—43 adults and 24 youth, including four members who “scrambled” in Australia, Costa Rica, and two locations in California, Monarch Beach and San Jose.

The youngest member of the team was 5 years old and the eldest member was a youthful 68. We appreciate the participation of Scramblers of all ages.

Each member of the team was asked to raise funds to support Renfrew Institute programs and activities. These fund-raising efforts, along with our lead sponsor, **TruCut Lawn and Landscape**, and contributing sponsors, **Grove-Bowersox Funeral Home, Quang and Tammie Tran, Dave and Tawnya Secor, WACCO, The Runner’s Sole, R. Thomas Murphy and Associates, Eichholz Flowers**, and **Cornerstone Family Dentistry**, raised nearly \$7,000 for the institute.

Top fundraisers included the **Skroban family**, the **Kelley family**, and the **Bui/Cao family**—thank you for your efforts! Those families won great prizes, see sidebar.

Prizes were also awarded to the top male and female finishers in both the adult and youth categories. In addition, 14 scramblers finished in the top three for their respective age group from the full field for the Firecracker 5K. *Great job!*

We Scramblers strive to include people of all abilities and encourage all members and friends of the institute to “scramble” with us next year! It doesn’t matter whether you are an active runner, a walker, or only able to make a donation to our cause. Your support is vital to our success.

In addition to the financial success of the event, the race provides a great day of camaraderie for members and friends of the institute, as is evident in the photos on these pages. Whatever our individual 5K goals may be, we all share the same goal of supporting the institute.

As an end-of-the-fiscal-year fundraiser, the Salamander Scramble raises vital funds that enable Renfrew Institute to continue its mission of providing top tier cultural and environmental education to the surrounding communities.

We thank all the participants and sponsors who made this year such a success and look forward to including many more of you on July 4, 2013!

Jeremey Bowersox  
Salamander Scramble 2012 Chair



## SALAMANDER SCRAMBLE Awards & Prizes

Several team members were recognized at the conclusion of the 5K. In addition to prizes awarded to category “winners,” *all Team Salamander members receive our hearty and enduring gratitude for their support of Renfrew Institute’s activities through their participation in the 5th Annual Salamander Scramble.*

FASTEST ADULT FINISHER, MALE:

- **Dustin Sanders**—Nathan flashing safety light

FASTEST ADULT FINISHER, FEMALE:

- **Michelle Benshoff**—Smart Wool & Under Armor sock bundle

FASTEST YOUTH FINISHER, MALE:

- **Abram Moats**—Peak Running book

FASTEST YOUTH FINISHER, FEMALE:

- **Monica Beck**—Reebok six-pack of socks

MOST FUNDS RAISED:

- **The Skroban Family**—*Wow!*  
**Inn BoonsBoro** overnight luxury accommodation, with evening wine service
- **The Kelley Family**—River and Trail Shenandoah River Float
- **The Bui/Cao Family**—River and Trail Shenandoah River Float

*Great Prizes for Top Fund Raisers!!!!!!*



YOUNGEST SALAMANDER:

- **Joel Moats, age 5**

ELDEST SALAMANDER:

- **Dr. Greg Lyon-Loftus, age 68**

MOST FAMILY MEMBERS:

- **Moats Family** with 7 members (Kristie, Andy, Abram, Levi, Abigail, Isaac & Joel)

GRIT AWARD:

- **Lori Schlosser**, completed the course on crutches

ROAMING SALAMANDERS:

- **Wayne Buhrman** (Australia)
- **Luke Baumgardner** (Costa Rica)
- **Bea Bocalandro** (Monarch Beach, Calif.)
- **Quang Tran** (San Jose, Calif.)

# The Scramblers were Scramblin'!



Team Salamander 2012

AUSTRALIA

192

196

16

189

30

141

533

255

17

529

309

308

72

384

699

128

161

240

## New Sponsorships *continued from pg. 7*



*Trail of Trees brings students into the woods to explore seasonal changes and tree science. The program has two new sponsors, Bartlett Tree Experts and Drexel University Online. Photo by Tracy Holliday.*

important human uses of our forest resources.

Bartlett Tree Experts provides services to the south central Pennsylvania area, western central Maryland and the eastern panhandle of West Virginia. Arborists in their Chambersburg office are committed to

helping local residents and businesses maintain beautiful, healthy trees and shrubs.

**Drexel University Online** has also embraced the *Trail of Trees* program through a partnership that aligns our missions; both rooted in innovative education.

Founded in 1891 and offering online degrees since 1996, Drexel University has become renowned for innovative, Internet-based education programs for working professionals and corporations in the United States and abroad.

Drexel's accredited online degree programs are designed for professionals who want to complete or advance their education at an online college without compromising quality.

As we observe the natural cycles that surround us in the park, and share scientific explanations for such phenomenon with visiting students, it's gratifying to know we can rely on strong partnerships and sponsors like Drexel and Bartlett to help us deliver the kind of immersion experiences valued by local students and educators.

### **New Sponsors Join in Support of Earth Celebration Day and Recycle Reuse Yard Sale Spring Events**

Earth springs forth with blossoms and breezes that coincide with Renfrew Institute's *Earth Celebration Day and Festival of Art*, and *Recycle Reuse Yard Sale Fund-raiser*. These April traditions benefited financially this year from new sponsor involvement by **Hoppers** and **Sterling Financial Management**.

In a perfectly aligned partnership, waste collection/disposal and recycling firm, **Hoppers** contributed underwriting support to the Earth Celebration event. Founded in 2011 by Dan Long, Hoppers' "hoppers" are easily recognized bright green receptacles bearing the image of a stylized frog, which are available to business and residential customers throughout the region.

**Sterling Financial Management** extended support for the institute's Recycle Reuse Yard Sale. Just as the recycle yard sale event is designed to add value by

extending the use of household items and resources, Sterling Financial Management operates to add value to personal wealth by guiding individuals and families in wealth management.

Founded by Dave Neterer in 2009, Sterling Financial Management, Inc. is a comprehensive financial services firm committed to helping its clients improve their long-term financial success.

We're grateful to our business partners for helping Renfrew Institute achieve its mission through the successful delivery of these two important traditional community "spring flings."



*Crowds of shoppers filled the park during the Recycle Reuse Yard Sale in April. Visitors also enjoyed Earth Celebration Day/Festival of Art on the same day. Hoppers and Sterling Financial Management are the newest sponsors of the institute's annual spring events. Photo by Tracy Holliday.*

### **Summer Institute Welcomes New Sponsors**

Since 2006, Renfrew Institute has offered a series of summer happenings for youth under the *Summer Institute* banner. These experiences differ from the school programs that occur during the academic year. Some, like *Nose-to-Nose with Nature*, are more spontaneous in their approach to exploring the natural areas in the park.

A gift from **Stephen and Maxine Beck** in support of the *Nose-to-Nose* experience helped us deliver such

excursions this past summer. For a string of Wednesday mornings, young participants arrived, donned wooden cookie nametags, and scooted off with an institute faculty member to remote corners of the park to explore secret spots, create fantasy faerie huts, and check out some of the weird and wild critters that live here, equipped with special tools for close-up looking.



*Checking out tree bark? Looking at bugs? Kids literally get "nose to nose" with nature in the Summer Institute program of that name. Stephen & Maxine Beck sponsored the popular program last summer. Photo by Tracy Holliday.*

*(continued on page 21)*

## Summer Institute 2012

*Summertime...and the livin' was—FUN!*

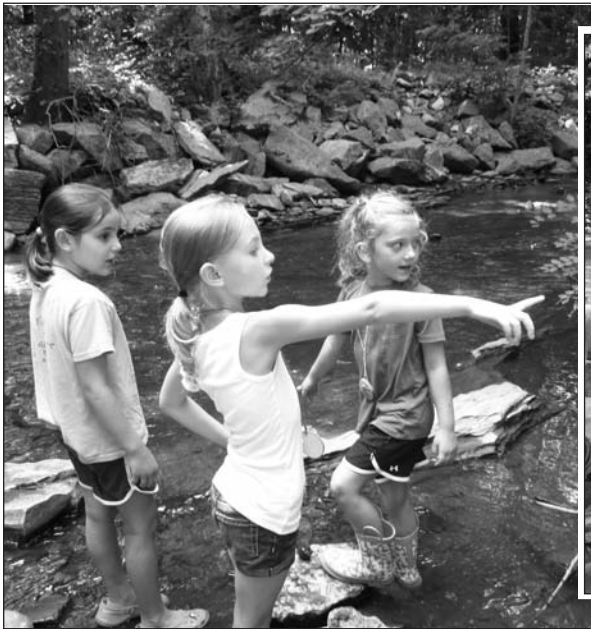
Once again, summer brought kids and families to the park. Young children enjoyed *Summer Stories* under the tree near the Visitor Center. Kids got *Nose to Nose with Nature* and experienced fun summertime nature activities in the park, often ending by dipping their toes in the cool water of Antietam Creek on hot, hot days.

Kids walked *Down a Garden Path* to the four square garden, where they planted, blew bubbles with plant stems while relaxing under the shade of the walnut tree, and participated in other garden related projects.

Young archaeologists discovered that *Not All Archeology is Digging* when they studied the old Covenanters' Cemetery in Renfrew Park, using modern technology to discover what is under the ground.

Students got in touch with their inner artist in *Heritage Crafts* classes, where they made beautiful pottery and baskets.

Photos by Tracy Holliday & Andrea Struble



## Downstream: Marcellus Shale

(continued from pg. 3)

### Brief Introduction to Marcellus Shale

Marcellus Shale is the lowest formation unit of the Devonian age Hamilton Group. [Ed. note: *The Devonian Hamilton Group is a mapped bedrock unit in New York, Pennsylvania, Maryland and West Virginia. These rocks are the oldest strata of the Devonian gas shale sequence.*]

The Marcellus Shale unit is primarily composed of black shale with small deposits of pyrite. Black shale is a fine-grained sedimentary rock formed by the compaction of clays, silts, or mud. Pyrite is an iron sulfide commonly known as ‘fool’s gold.’

The Marcellus Shale formation was deposited in the Devonian age [Ed. note: *a period that lasted from 417 million years ago to 354 million years ago*] in a continental interior seaway that was bounded by the Acadia Mountains. This created a suitable environment for shale and natural gas to form—organic material from the sea was deposited within the shale formation, creating a shale rich in natural gas.

Marcellus Shale is known as ‘tight shale’ because the shale porosity and permeability are low. (Porosity is the measure of void space in rock material. Permeability is the measured ability to transmit a fluid within a rock material.) Marcellus shale porosity may be as high as 10% and permeability is .01 millidarcies or less. This means that the shale pore space is very small, creating an environment in which it is difficult for natural gas to move, thereby becoming trapped.

Marcellus Shale was named after an outcrop near Marcellus, NY, and covers most of the states of Pennsylvania and West Virginia, plus portions of Ohio, New York, Maryland, and Virginia. It extends over 95,000 square miles with varying depth, and can be found in most areas of Pennsylvania except the central and southern regions. The extent of Marcellus Shale in Pennsylvania is indicated in the darker areas in the map below.



Marcellus Shale is present in the darker areas of this map of Pennsylvania. Image from pahikingtrails.com.

### Hydraulic Fracturing

Hydraulic fracturing in combination with horizontal drilling enables the oil industry to extract natural gas from rock formations with low porosity and permeability. The process of hydraulic fracturing for drilling combines

pressure, hydraulic fluid, and sand to create fractures, which increases the permeability of the Marcellus Shale. This allows the natural gas to flow within the shale.

An illustration and explanation of the process may be found at:

[www.nytimes.com/interactive/2011/02/27/us/fracking.html](http://www.nytimes.com/interactive/2011/02/27/us/fracking.html)

The first step in hydraulic fracturing is to set up a temporary drill called a derrick. A vertical well is drilled several thousand feet below the derrick, passing below the water table. Once the drill passes the water table, casing or cement is poured to seal the wellbore from the groundwater.

The drill continues vertically until it hits the targeted formation—the Marcellus Shale. Then, once the shale is reached, horizontal drilling is used to reach the target zone in the shale. A perforating gun creates fractures within the shale, and water, lubricant, chemicals and sand are then added into the wellbore.

Natural pressure forces the water back to the surface where the waste water is contained in containment tanks or pits. The sand pumped into the wellbore remains in the created fractures as support for the fractures. After this process, the natural gas that was trapped is released from the shale and flows to the surface where it is piped to refineries.

Hydraulic fracturing has been used for more than 60 years in a process that employs precision engineering. It is intensely monitored in its application. During drilling, fracture growth in the shale is monitored.

However, concerns remain regarding the chemicals used in the water to reduce friction in the drilling process, and the surfactants and biocides that are used to help the scale of fracture in formation, increase flowback (which is waste water), and limit bacteria growth.

In addition, diluted hydrochloric acid is used in the beginning of the drilling stage to clean debris from the wellbore and cementing process—another chemical of potential environmental consequence if used irresponsibly. Drilling sites are therefore supervised carefully to make sure production requirements and regulations are followed. These sites are observed for leaks or errors and to make sure no unnecessary risks are taken.

There are environmental risks associated with every industry. Even though companies carefully monitor drill sites and follow regulations, accidents can and do occur. In the case of Marcellus Shale, a major concern with hydraulic fracturing is its impact on water quality.

### Water Quality Impacts

There are concerns with hydraulic fracturing and its impact on the water quality surrounding Marcellus Shale drill sites. In spite of the fact that drill sites are monitored and supervised to prevent water quality impact, there are risks to water quality inherent in every industrial operation—and the process of hydraulic fracturing can have particular risks to water quality.

(continued on pg. 17)



## Downstream: Marcellus Shale

(continued from pg. 16)

In the process of hydraulic fracturing, the drill passes the water table and then casing or cement is poured into the well to seal it from the groundwater. The purpose of the casing or cement is to prevent byproducts used in hydraulic fracturing from contaminating the groundwater.

However, this process is not foolproof. Casing or cement failure can occur, causing a leak in the well, and possible seepage of byproducts into the groundwater. To prevent such leaks, the casing or cement used inside the wells has been carefully developed by experts.

Groundwater may also be contaminated from leakage and spillages at the drill. If this occurs, the drill should be cleaned to the appropriate regulatory standards.

Hydraulic fracturing uses 300,000 gallons of water a day. In a two-to-five day period, between four and seven million gallons can be used for the whole process. This water comes from nearby sources such as lakes, rivers, private water companies, municipal water, or recycled water from prior hydraulic fracturing.

There is a concern that the amount of water consumed in small areas could result in water depletion for that area. The use of recycled hydraulic fracturing water should decrease the amount of water consumption, which lowers the risk of community water depletion.

### Concerns About Chemicals

The water pumped into the well is mixed with chemicals—friction reducers, biocides to control microorganism growth, and surfactants. Hydraulic fracturing uses 78 different chemicals, some of which are known to be hazardous.

A list of 20 toxic chemicals used in hydraulic fracturing can be found on this web page: <http://toxmap.nlm.nih.gov/toxmap/news/2011/11/learn-about-toxic-chemicals-used-in-hydraulic-fracturing.html>

A comprehensive list of chemicals used in hydraulic fracturing may be found here: <http://marcellusdrilling.com/2010/06/list-of-78-chemicals-used-in-hydraulic-fracturing-fluid-in-pennsylvania/>. The website list is updated as of July 6, 2012.

Companies that engage in the hydraulic fracturing process are required to disclose the chemicals mixed with the water, but the amount of each chemical used is not disclosed.

A concern has been expressed regarding the risk of contaminating healthy ground or surface water with these chemicals used in the hydraulic fracturing process.

Contamination may occur to groundwater through chemical seepage due to casing or cement failure. Surface water contamination is also possible through the flowback.

Flowback is the wastewater previously pumped into the well, that comes back to the surface through natural pressure. Flowback is characterized by its high concentration of dissolved solids, and contains brines, dissolved constituents found in the rock, the mixed chemicals, sodium, calcium salts, barium, oil, strontium, iron, heavy metals, soap, and radiation.

### Wastewater & Contamination Concerns

Pennsylvania's Department of Environmental Protection (EPA) regulates the disposal of flowback, or of any water on a drill site. Wastewater is held in retention pits or tanks until the flowback is transported to water treatment facilities for proper disposal.

A concern with the transportation of wastewater from a drill site is that few treatment plants can handle the amount of intake, or do not have proper equipment to handle the wastewater.

Due to the lack of EPA-approved facilities that can handle the wastewater, the waste travels great distances to get to a proper facility. A solution to counteract this long-distance travel is to construct appropriate wastewater treatment facilities close to drilling sites, but this is expensive and it is not clear who should bear the cost of such an enterprise. For now, wastewater is transported to the facilities that are equipped to handle its disposal.

The wastewater on a drill site is monitored to prevent contact with public water supplies and aquatic ecosystems. However, wastewater contamination into public water supplies and aquatic ecosystems can occur because of equipment failure, casing or cement failure, retention failure, or failure in transporting the wastewater.

Contamination that occurs in one watershed may affect other watersheds in a region, since some are interconnected. The water on a drill site and water systems around the site are analyzed to observe any effects of contaminated water on nearby water systems.

### Domino Effect

In summary, conducting hydraulic fracturing of Marcellus Shale has been debated for the past several



Article author, Shippensburg University, a graduate student in Geo-Environmental Studies, Hannah Beker interned last summer at Renfrew Institute. Here, she is collecting macroinvertebrates from a local stream in the Antietam watershed. Photo by Melodie Anderson-Smith.

(continued on pg. 20)

# Renfrew Institute Members & Sponsors

Includes 2011–12 members and new/renewed for 2012–13 \* = Honorarium—for donation of special time, talent and/or materials.

## Today's Horizon

### (\$3,000 or more, multi-yr.)

APX Enclosures, Inc./Andrew Papoutsis

Carolyn Terry Eddy Family

Nora Roberts Foundation

## Heritage Society

### (\$1,000 or more)

Mr. & Mrs. John W. Beck

Beck Manufacturing, Inc.

Leonora Rocca Bernheisel

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Cinetic Landis Grinding

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Capital RC&D Area Council,

Inc.

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## Downstream: Marcellus Shale

(continued from pg. 17)

years. Marcellus Shale is black shale of the Devonian age that contains natural gas. Due to the fact that the shale is tight, the process of hydraulic fracturing is used to release the natural gas.

The hydraulic fracturing process has been used for more than half a century to extract gas and oil from geological formations like Marcellus Shale. Hydraulic fracturing is a process that combines pressure, hydraulic fluid, and sand to create fractures within the shale, thereby releasing the natural gas.

Large quantities of water are used in the process, as well as a mixture of chemicals, some of which are hazardous. Concerns exist about contamination of groundwater and surface water due to failure in equipment, the disposal of cuttings and wastewater.

Producers are monitored to prevent contamination to public water supplies and the aquatic ecosystem. Each procedure for hydraulic fracturing is performed only after it complies with pertinent regulations and permits mandated by the government and completed by the EPA. The practices used in hydraulic fracturing must also comply with OSHA standards.

Marcellus Shale has a ‘domino effect’ on Pennsylvania. Drilling anywhere in the state may affect the environment in central and southern Pennsylvania, although those areas do not have concentrations of Marcellus Shale. The containment of wastewater and maintenance of water quality in one watershed can affect another watershed because stream systems are like branches connected to a tree. One affected stream or

watershed can then affect another, so that a community may experience the effect from contaminated water that initially came from another area.

The water impacts of hydraulic fracturing are lessened to the extent that these practices are regulated by applicable codes, which are carefully enforced through strict monitoring.

Those concerned about Marcellus Shale drilling can seek stricter regulations for oil and gas companies to follow. It is up to you as a citizen to decide how you choose to respond to the future of Marcellus Shale drilling in Pennsylvania.

For more information about Marcellus Shale or to become involved with water monitoring at a Marcellus Shale location go to:

[www.dickinson.edu/about/sustainability/allarm/content/Marcellus-Shale/](http://www.dickinson.edu/about/sustainability/allarm/content/Marcellus-Shale/).

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- [www.earthworksaction.org/issues/detail/hydraulic\\_fracturing\\_101](http://www.earthworksaction.org/issues/detail/hydraulic_fracturing_101)
- [www.nytimes.com/interactive/2011/02/27/us/fracking.html](http://www.nytimes.com/interactive/2011/02/27/us/fracking.html)
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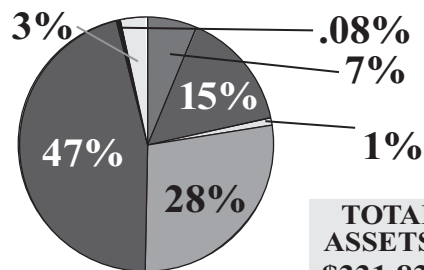
# Renfrew Institute's Financial Health

## Renfrew Institute Financial Statement 2011-12

(July 1, 2011-June 30, 2012)

Operating Income		Operating Expenses	
Memberships	\$31,736	Salaries, Benefits, FICA (faculty & admin.)	\$149,278
Bequests, Memorials	5,200	Community Events	6,926
Student Fees (inc. adult/teen wkshp & Summer Inst.)	40,316	Fund Raisers	15,951
Grants/Sponsorships (educational programs)	38,902	Suppl., Printing, Postage (programs, office, newsletter, etc.)	10,994
Grants/Sponsorships (community events)	8,103	Professional Devel. & Chamber Memberships	852
Grants/Today's Horizon Fund	19,171	Admin./Consult. Fees	2,202
Fund Raisers (Pumpkin Fest, Yard Sale, Bay Supper, Salamander Scramble)	43,116	Phone/Internet/Equip. Maint.	1,643
Other (special projects, interest, misc. donations, etc.)	4,109	Insurance	1,890
Restricted Income (website upgrade, garden tree/vol. dinner, water testing)	1,100	Misc. (petty cash, exhibits, volunteer appreciation, mtg. snacks)	595
<b>TOTAL</b>	<b>\$191,753</b>	Restricted Expense (pt. web upgrade, garden tree/vol. dinner, water testing)	617
<b>Capital Income</b> (No new capital projects this year)	<b>0</b>	<b>TOTAL</b>	<b>\$190,948</b>
		<b>Capital Expense</b> (No new capital projects this year)	<b>0</b>

## Renfrew Institute Assets as of 6/30/12



**TOTAL ASSETS: \$331,832**

Checking Account: (cash flow corrected) -\$3,101

- 7%—Savings: \$21,583 (new interest-bearing account)
- Petty Cash: \$100 [not on chart]
- 15%—M&T Securities (reserve/operatns holding): \$51,133
- 1%—Today's Horizon (prepaid, held in CD): \$3,285
- 28%—Bequest Trust Fund (operations): \$93,524
- 47%—Endowment Fund/Margaret Keller Fund: \$154,416 (Bonds & mutual fund investments)
- .08%—Accounts Receivable: \$2,706
- Prepaid Expenses: \$171 [not on chart]
- 3%—Fixed Assets: \$11,300

## New Sponsorships *(continued from pg. 14)*

Parents, grandparents and young nature lovers all seem to appreciate an unhurried, professionally guided experience tailored especially for our youngest naturalists.

Older youth also benefited from a recent gift to *Summer Institute*. **Anne Shepard** and **Patrick Minnick** made a donation in support of a workshop especially designed for middle and high school students—"Not All



*During a Summer Institute workshop, archaeologist Scott Parker, left, taught students to use scientific equipment to explore the Covenanter's Cemetery in Renfrew Park. The program was sponsored by Anne Shepard and Patrick Minnick.*

Archaeology is Digging."

Facilitated by archaeologist Scott Parker, with support from Doug Stine, President of the Cumberland Valley Chapter 27, Society for Pennsylvania Archaeology, the workshop allowed participants to use specialized equipment to investigate the Covenanter's Cemetery on park property.

In a non-invasive, dig-free method of "seeing" underground using soil resistivity equipment, students were able to learn about tools of the trade, and discover specific findings on this site. The results of their exploration were recorded by Parker, with findings presented in a full color report presented to the institute upon completion of the program.

The institute strives to offer experiences that arouse curiosity and invite learning for all members of our community, whether young or old, with interests rooted in nature or history. Thanks in great part to investments by friends like the Becks, Shepard and Minnick, Renfrew Institute is able to plan and deliver such opportunities.

### **New Memorial Donation Supports Second Grade Earth Encounters Experience**

In 2009, puppet character Mother Nature, of *Earth Encounters* fame, lost one of her biggest fans, when Washington County, Md. school bus driver, **Harry D. Catts**—who had traveled this way in the company of hundreds of second grade students over many years—was involved in a highway accident that claimed his life.

In memorializing Harry, **Bernie and Rosemarie Roberts** made a donation in support of the *Earth Encounters* program in his honor. They have continued this memorial gift annually, designated in support of the *Earth Encounters* experience enjoyed by second grade students.

Recently, the Roberts made an additional gift in memory of Rosemarie's late father, **Richard G. McGowan, Sr.** Richard retired from NASA's Goddard Space Flight

Center in 1979 and moved to Smithsburg, where he lived until 2010, when he moved to Fahrney-Keedy Nursing Home. Rosemarie and her husband Bernie have chosen to honor his memory, also, with a gift in support of *Earth Encounters*.

Students who experience the *Earth Encounters* program meet Mother Nature as they learn about the living (plants, animals, insects and such critters, and fungus) and non-living (soil, air, water and sun) parts of nature. Included in the conversation is discussion about how all the parts of nature contribute to the cycle of life on Earth, and how all the "parts," including people, are essential.

We're deeply honored to help the Roberts remember Richard and Harry, important people in their lives, as their gift helps young members of our community learn about the world in which they live.



*Examining bugs is just one part of the fun for students in the environmental program, Earth Encounters. New underwriting support for the program was provided by Bernie & Rosemarie Roberts in memory of Richard G. McGowan, Sr. and Harry D. Catts. Photo by Tracy Holliday.*

### **Institute Office Gets Technology Upgrades**

The **Waynesboro Beneficial Fund Association** (WBFA) has provided funding support that will enable the institute to proceed with an important technology upgrade project.

Funds provided by WBFA will finance the acquisition of several software upgrades, and will also fund the purchase of a new laptop computer.

Begun in 1912, the Waynesboro Beneficial Fund Association has quietly worked to benefit the community as they administered funds to support organizations that serve the community.

Funds administered by WBFA have been bequeathed, sometimes with very specific instructions, and others left to the discretion of the appointed local board of directors.

We're grateful for WBFA's support of Renfrew Institute, and its impact on our ability to keep up with technology in a way that maximizes our effectiveness as we serve the community with programming.

In addition to our gratitude, we also extend congratulations to the Waynesboro Beneficial Fund Association in marking 100 years of service to the community.

### **Streamside Buoyed by New Support**

Thanks to a recent gift from **Waynesboro's VFW Post 695**, additional funding support for this newsletter is in place. Institute members appreciate *Streamside* as a

*(continued on page 25)*



Legacies abound in the story of Renfrew Institute's partnership with **Bonded Applicators** and their support of our sixth grade farmstead interpretive program, *The Royer Legacy*.

In 1947, with one pickup truck and three employees, current company president Amy Weber's grandfather, C. Glenn Fry founded Bonded Applicators, Inc.

Since her grandfather's beginnings and throughout her father Robert Fry's leadership, Bonded Applicators has grown. The business has passed from father, to son, to daughter, with pride and care for the heritage that is the foundation of this three-generation enterprise. In April 2012, Bonded Applicators celebrated its 65th year in business.

Daniel Royer established his prosperous industrial farmstead in this spot along the Antietam Creek in the early part of the 19th century. The farm's history endures in the beautiful Royer mansion, which just marked its 200th year, and a full complement of farm buildings that served as the foundation for the industry that occurred here throughout the 1800s.



Students in the institute's cultural education program, Royer Legacy, learn about preserving historic structures and artifacts. Here, participants learn about the Museum's porch restoration project. Royer Legacy has long been sponsored by Bonded Applicators, Inc. Photo by Tracy Holliday.

Daniel Royer's legacy passed through the hands of Emma and Edgar Nicodemus, 20th century stewards of the property, who with their gift to the borough of Waynesboro created a legacy of their own. Their bequest to the borough in 1975 was guided by Emma's vision for creating what is now known as Renfrew Museum and Park.

In 1990, Renfrew Museum's directors created Renfrew Institute as a separate non-profit organization charged with developing, delivering and funding educational programs headquartered on this site.

In the ensuing years, thousands of school children have enjoyed natural and cultural heritage explorations here on the farm, linking them to this place and planting the seeds for stewardship that will carry this legacy into future generations.

Since 2006, Amy Weber and Bonded Applicators have extended support that provides underwriting funds for the capstone experience of the institute's farmstead series.

Throughout their elementary careers, students investigate the ways in which the natural world has shaped the human experience in this place throughout history. They learn about life on a long ago farm through the eyes of children, making butter with "Nancy Fahnestock," performing chores in the PA German Four Square garden, washing and carding wool fleece, braking, scutching, spinning and weaving flax into linen cloth, stomping kraut, grinding corn...tasks that vary with their annual visits from kindergarten through fifth grade.

Finally, when they reach sixth grade, they knit the stories together with a walking tour of the entire farmstead in an offering known as *The Royer Legacy*. They learn of the Nicodemus' bequest, and the farm's evolution toward the public treasure it is today.

And after years of asking, "Do we get to go into the big house?" they finally get to tour the Royer mansion, learning the details of what it takes to preserve such a grand edifice for public enjoyment. Over their seven-year journey, Renfrew Institute's programs bring them to this site, revealing its stories and building connections. As they journey through those years and adopt its stories for their own retelling, this place becomes their place! What a wonderful legacy!

It seems fitting for a company modeled on legacy and heritage to provide a means of helping to invite future stewardship of this special place.

"We are honored to be able to contribute to a commendable establishment that educates the youth of our community," Amy Weber said recently. "Too many children today stay inside, engrossed in technology. Renfrew provides a great opportunity for them to get outside and enjoy history and nature."

On behalf of the community benefiting from experiences that build connections to the past, and to the natural world, we extend gratitude to Amy Weber and Bonded Applicators for their role in making it so.

Tracy Holliday

**R**ecently, super storm Sandy helped us remember the definition of wetlands...lands that are sometimes or always covered by shallow water or have saturated soils, and where plants adapted for life in wet conditions usually grow.

As a few of us traversed the park on Wednesday following the storm, areas we formerly trekked as walking paths had become tributaries, transforming the landscape into a submerged wonder that we recognized as a periodic happening in Renfrew's wetlands. In fact, the very spot where sixth grade students gather to begin their study of this special ecosystem was the center of a rapidly racing stream of water that had already deposited a new sand/gravel bar in a previously open grassy spot. We recognized the teachable moment!

The **Craig, Friedly, Potter and Moore Insurance Agency** has helped Renfrew Institute deliver teachable moments since 1999 through its sponsorship of the sixth grade program *Discovering Wetlands*.

The Agency has served our area since 1910, insuring people in Pennsylvania and Maryland from their office at 3 West Main Street in Waynesboro.

Brokers Tom Moore and Greg Duffey have demonstrated care for the institute's work and mission for more than a decade.

Upon their arrival to the wetlands experience, Waynesboro students have a well versed understanding of some basic cycles operating in the natural world...the water cycle, photosynthesis, soil formation, energy exchange, interdependence among members of various ecological communities... gleaned through their earlier involvement in institute programs.

During their excursion into the wetlands, students are immersed in that special ecosystem, closely investigating soil, plants and critters specialized for an intermittently submerged existence. They learn about special features of wetlands that make them invaluable...as sponges (to prevent flooding), filters (to contain pollution), and habitats for living things that occupy crucial roles in the collection of complex ecological communities that we call planet Earth.

As they conclude their Renfrew Institute school series visits in the wetlands, sixth grade students participate in a special graduation ceremony, dubbing them Heritage Keepers.

"As a Heritage Keeper you hold much knowledge about Renfrew," institute faculty members tell graduates.



"You know of its natural wonders and the stories of the people who have lived here through the centuries."

Students make a necklace to commemorate the occasion. The flax yarn represents the story of history, which includes the Royer family from Renfrew, and the



*Students in the institute's environmental school program, Discovering Wetlands examine an aquatic plant held by instructor, Lori Schlosser. The program is sponsored in part by Craig, Friedly, Potter & Moore Insurance. Photo by Tracy Holliday.*

larger cultural heritage of the Waynesboro area. The first earthenware bead of red clay—the same clay used by famous potter John Bell—represents all the knowledge students have acquired through their elementary years.

The lucky bean, from the Kentucky coffee trees found at Renfrew, represents the student: "a seed with more growing to do."

The second earthenware bead stands for all the knowledge yet to come. The necklace takes the form of a circle to represent history, where we learn from our past to influence

the future. Graduating students carry a sense of responsibility for the care of Renfrew, today and into the future.

When asked about their motivations for involvement, Duffey and Moore said, "We are proud to sponsor the *Discovering Wetlands* program! We feel strongly about giving back to the community, especially when we can help children. We are blessed to have such excellent programs here in Waynesboro at the Renfrew Institute."

As we strive to fulfill the institute's mission through educational activities that impact countless young lives, we're grateful for Craig, Friedly, Potter and Moore Insurance Agency's steadfast and enthusiastic support.

## Interns Explore Geo-environmental Studies with Renfrew Institute



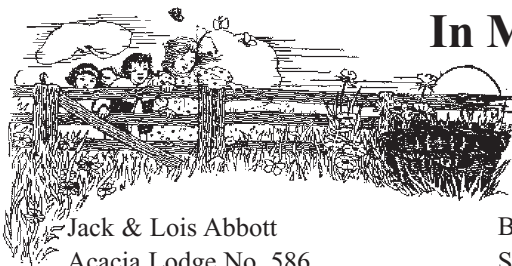
**Photo at right:** Shippensburg University interns Eric McGilliard (*left*) and Sean McNally investigate macroinvertebrate life within packs of leaves retrieved from the East Branch Antietam Creek after submersion for a one month period.

The interns were with Renfrew Institute in the spring of 2012. They compared species present in the stream at two ecologically different locations, Michaux Forest and along farmland off Lyons Road in Waynesboro.

Dr. Claire Jantz, Associate Professor, Geography-Earth Science at Shippensburg University (SU), shown here in photo at left with interns Eric McGilliard and Sean McNally, has supervised several interns at Renfrew Institute in the last few years.

She has been instrumental in the development of intern projects involving GIS (Geographic Information Systems) technologies to interpret the Antietam Creek watershed.

We look forward to continuing RI's partnership with Dr. Jantz and other professors at SU along with Antietam Watershed Association as we welcome additional geo-environmental studies interns in the months ahead.



### In Memory of Judge John W. Keller...

*...gifts to the Margaret Keller Memorial Program Fund (held within the Institute's endowment fund) have been given by the following:*

Jack & Lois Abbott  
Acacia Lodge No. 586

Martha A. Adams

Dan Arthur

Ausherman Bros. Real Estate, Inc.

Steve & Maxine Beck

Tom & Cookie Beck

Nancy Besch

Bill & Marjorie Blubaugh (*in memory of Judge & Mrs. John Keller*)

Ruth Bolinger

Bob & Grace Brown

George & Marty Buckey

Anne, Bill, Ryan Conrad

Greg & Debi Duffey

Carolyn Eddy

Kristan Eddy-Thorne & Amelia

Bill & Liz George

Steve Graham

Jay & Pat Heefner

Jackie Henicle

Bill & Kathleen Kaminski

Marge Kiersz

Jeffrey Koch/Radio Maintenance, Inc. Larry & Darlene Sease

Cindy Lee Kolpack

Jane Lordeman, Lordeman Assoc.

Lynn MacBride

Yvonne MacBride

David & Betsy Marateck

Wayne & Debbie Martz

Nancy & Brad McCullough

Linda & Wallace McNew

Sonialee "Sue" Miller

Katherine Nicodemus

Tracy Patterson

Mark & Christine Pettigrew

Keith & Elizabeth Quigley

Christopher & Connie Richwine

Jeff Rock

Larry & Darlene Sease

Dick & Julia Shook

Steve & Leslie Stevenson & Family

Eunice Statler

Ellen Ternes

Bernadine C. Tomlinson

Carol & Rodney Varner

Angela Grove Weagly

Bonnie & Bob Wolff

Ruth D. Ziegler & Family



## New Sponsorships continued from pg. 21

means of helping them learn “What’s happening at the institute?” and “How can I be involved?”

It’s a vehicle for us to share information that relates to our mission of education and stewardship. In its pages, we also acknowledge (and toot horns for!) the multitude of people and organizations that help to keep the wheels in motion as the institute serves the community with valued programs.

Richard Hovis, VFW Post 695 Commander, described the VFW’s origins. The VFW is the nation’s oldest major veterans’ organization with 1.6 million members, which have included members from WWI to present deployments.

Organized in 1899, two predecessor organizations were established to secure rights and benefits for veterans of the Spanish-American War (1898) and the Philippines War (1899-1902). Those two organizations merged in 1914, creating the Veterans of Foreign Wars of the United States. A Congressional charter for the organization was received in 1936.

The Waynesboro Post was chartered in 1934, and of course, also received its National charter in 1936. The VFW is a vibrant organization dedicated to a set of principles with which all Americans can identify. It is devoted to peace, and comprised of members who have fought for and are ready to defend individual liberties and dignities. The four pillars of its foundation—care for veterans, national defense, patriotism and community service—remain relevant.

Hovis offered these remarks about the VFW’s motivations in supporting *Streamside*.

“Ours is a premier Veteran’s organization helping a remarkable institute provide an educational program for our youth, our future leaders, for community betterment,” he said.

“Never forgetting the community service pillar of the VFW foundation, the Post members are both pleased and honored to take a small part in helping the Renfrew Institute realize its aspirations.”

We’re grateful for our local VFW Post 695’s commitment to community, and especially for their part in supporting Renfrew Institute’s *Streamside*.

Tracy Holliday

## WaterStriders Field Trip

Middle school students involved in the Institute’s *WaterStriders* after school program, along with their families, toured Hundred Fold Farm near Ortanna, Pa. in early November. The sustainable community features solar powered homes and special water treatment systems that recycle wastewater. (Field trip group in photo, left)

WaterStriders learned that “gray water” (used for flushing) is safely produced using biotic (plant) action tanks and artificial marshes in an indoor greenhouse, shown in photo below, right.

The *WaterStriders* program is open to students grades 6 through 12 who are fascinated by life in the waters of our local streams and who want to help take care of the Antietam Creek Watershed. Under the supervision of the institute’s teaching staff, Striders meet once a month to conduct water quality monitoring tests as part of the Antietam Watershed Association’s stream monitoring program.

Striders also check out macroinvertebrates (water critters), participate in other watershed activities, take field trips—like this one!—and enjoy the company of their fellow Striders. Photos by Melodie Anderson-Smith



## PA CHESAPEAKE CHAMPIONS— Renfrew Institute Joins Bay-wide Education Initiative: Data, Data, Data...Students Collecting Everywhere!



It seems to be, though not new of course, at least a methodology that is taking the education world by storm.

Students and their teachers or professors—and also citizen scientists of all ages—are collecting data related to every academic discipline, then uploading it to electronic data bases on the web to be shared by students (and in many cases the general public) locally, regionally or even world-wide. And now Renfrew Institute will be involved.

The institute will provide watershed education consulting services to the Pennsylvania Alliance for Geographic Education (PAGE), headed by Dr. Janet Smith, Department of Geography-Earth Science at Shippensburg University (SU).

Dr. Smith has received a sub-grant from National Geographic Society for development of NG's Chesapeake Bay Watershed Education Initiative in Pennsylvania. There are ten sub-grant entities covering the entire Bay watershed including seven states and Washington, D.C.

The two-year project is administered by NG with overall funding from the National Oceanic and Atmospheric Administration (NOAA).

RI executive director, Melodie Anderson-Smith accepted Dr. Smith's invitation to consult on the project. The institute will receive \$10,000 for its services.

Students in schools throughout the Bay watershed will be learning more about the water systems of their own home communities. Then, with the help of online computer databases and networks, including National Geographic's Field Scope, students will share data collected in their own watershed, building ecological and cultural connections to communities of learners in all reaches of the Bay's 64,000 square miles.

Anderson-Smith began working with Dr. Smith in May 2012, and over two school years will help design and implement teacher workshops for 50 Pennsylvania teachers each year.

The teachers will then kick-start watershed education within their own schools using resources highlighted during the workshops along with information gained through an online community of participating colleagues.

The project is targeted for middle schools, grades 5–8 and is being offered to 190 public school districts along with a number of private and home schools in the region. Waynesboro Area School District was the first to apply. St. Andrew School will also be involved.

"There is a wonderful opportunity here to help fulfill one of Renfrew Institute's strategic plan goals—that of expanding and strengthening RI's reach to middle schools in our service area," Anderson-Smith said.

"It is an honor to be invited to participate in this project and to work with Jan Smith. In addition, we are partnering with a number of leading Bay education organizations in our region. It is great to be actively engaged with that important network.

"RI will not only gain visibility, but will expand its resources so that our existing programs can benefit too. And we are providing expertise to the project," Anderson-Smith continued.

"I was so happy with the colorful flyer, teacher application and logo that the institute's PR director, Andrea Struble produced for us. It really professionalized the whole effort. And that was just the beginning!"

The application deadline for interested schools was September 28, and in October teachers were notified of their acceptance into the program. They are now immersed in online communication through a special SU website developed by Dr. Smith for the project.

All-day workshops will be held at Shippensburg University for participants on February 23 and March 23, 2013.

In addition to Waynesboro and St. Andrew, other near-by schools have been accepted: Greencastle-Antrim Middle School, James Buchanan Middle School, Chambersburg Montessori and Gettysburg Montessori. Seven additional regional schools are participating.



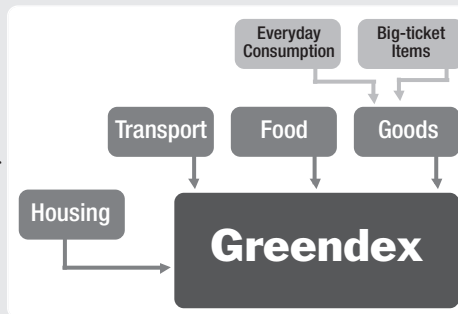
## Speaking of Data Collecting and National Geographic... *Check this out:* Nat/Geo's Greendex

[the following contains excerpts from National Geographic's website, link at end of article]

"You've heard about it for years now—everyone's interested in being green. But do you really know how your personal choices are adding up? What about the choices of your fellow citizens? What behaviors are people adopting globally that have a positive impact on environmental sustainability? What has changed—and what hasn't—in the past few years?"

This is the fourth year National Geographic has partnered with GlobeScan to develop an international research approach to measure and monitor consumer progress toward environmentally sustainable consumption.

The key objectives of this unique consumer tracking survey are to provide regular quantitative measures of consumer behavior and to promote sustainable consumption.



*The Greendex index tracks consumer choices.*

The 2012 National Geographic/GlobeScan "Consumer Greendex," is a scientifically derived sustainable consumption index of actual consumer behavior and material lifestyles across 17 countries."

You can try this out at home!

Link to National Geographic's Greendex page:

<http://environment.nationalgeographic.com/environment/greendex/>



*Just another day at the office—Sherry Hesse, RI's Director of Cultural Studies, loves her job! Photo by Tracy Holliday.*



## It's Fun Bein' Green...

Renfrew Institute is now a "Green Office," having qualified through Greenline Paper Co. in York, Pa. following completion of an online survey last August.

The survey asked questions related to the institute's practices in the "3 R's" (reducing, recycling, reusing), energy consumption and use of eco-friendly office products and program supplies.

We can now display the Green Office logo on our website and printed materials. To see more check out Greenline's website at: [greenlinepaper.com](http://greenlinepaper.com).



## Mark Your Calendars!

**Antietam Watershed Association**

Antietam Watershed Association, in cooperation with the Chesapeake Bay Foundation, will be planting approximately 600 trees and shrubs in the Antietam Meadows Park. When we have a good turnout, the morning flies by.

**Come join us!**

Saturday, April 13 • 9:00 a.m.

Antietam Meadows Park

Scott Drive

Waynesboro, PA

Go to [www.antietamws.org](http://www.antietamws.org) and click on "Contact Us" for additional information.

Pat Heefner

## Winter Twilight

On a clear winter's evening

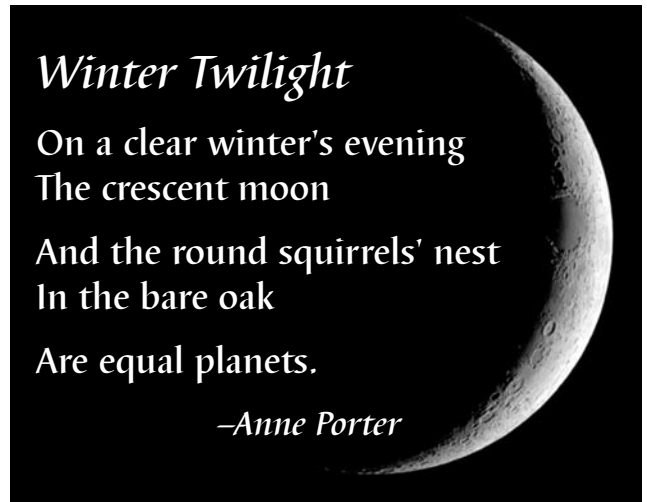
The crescent moon

And the round squirrels' nest

In the bare oak

Are equal planets.

—Anne Porter



## Memorial & Honorial Donations

Thank you to the following  
who have each made a special donation  
to Renfrew Institute

*In honor of...*

**Carolyn Terry Eddy  
and  
Nancy Miller Levick**  
by Steve Graham

*In memory of...*

**Elizabeth Johnston**  
by Marge Kiersz

*In memory of...*

**Ellen Reid**  
by Steve Graham

*In lieu of Christmas gifts,  
a donation has been made*

*In memory of...*

**Joyce Ceyler**  
and

*In honor of...*

**Eunice Statler**  
by Richard Ceyler

*In memory of...*

**Paul Beals**  
by Mike & Linda Ciavarella  
by Joan Fetter  
by Karen Kough  
and by Lois & Will Scarborough

*In memory of...*

**Paul & Mary Lou Beals**  
by Doris Goldman

*In memory of...*

**Joyce Ceyler**  
and

*In honor of...*

**Richard D. Ceyler**  
by Angela Grove Weagly

*In memory of...*

**Harry D. Catts**  
and

**Richard G. McGowan, Sr.**  
by Bernie & Rosemarie Roberts

*In memory of...*

**"Sassafras" Willy Calimer  
of Glen Furney**  
by Steve Graham



*Four-square garden volunteers enjoyed a delicious gourmet meal in the restored farmhouse at Willow Pond Farm in Fairfield, Pa.*

### A Celebratory Gardeners' Dinner

Many thanks go out to the Four Square Garden volunteers who help maintain the garden during the summer. We appreciate your efforts, and the beautiful garden reflects the care you provide.

*Thanks for all your time and effort!*

#### Four Square Garden Volunteers:

Maxine Beck	Conrad Naugle
Malee Cook	Leitha Rountree
Audrey, Trey & Melissa Foreman	Andy & Maggie Rovelstad
Gerti Hudson	Mary Lou & Lew Thomas
Linda King	Darlene Weddle
Amber Naugle	Li-Jen Wang



### Good Thing Gardening Burns Calories...

Garden volunteer coordinator, Pam Rowland, kneeling at center, treated volunteers working in the four-square garden to ice cream on a fine summer afternoon.

Left to right: Malee Cook, Darlene Weddle, Pam, RI faculty member and Garden Director, Doris Goldman, Leitha Rountree, Mary Lou and Lew Thomas.

## Got Maps? The Atlas of Global Conservation

If you like maps, here is a resource you need to see to appreciate—the *Atlas of Global Conservation*.

According to the Spring 2010 issue of *Nature Conservancy* magazine, “Readers can take measure of their own place in the world, not only by longitude and latitude but also by the types of habitats surrounding them, by the species that flourish at home but not elsewhere, and by the amount of conservation that has been done—or could be.

“The book includes more than 100 full-color maps and charts, as well as essays by leading conservation thinkers that put the information in its larger context.”

After reading how this amazing volume was assembled by a team of Conservancy scientists with the help of researchers and conservationists around the world, I turned the page to find the first of four sample maps. The first, Freshwater Fish, shows the global map in varied shades of blue, with the number of fish species by freshwater ecoregion.

South America, in stark contrast to North America, had large concentrations of dark blue (251–450 species) to darker blue (451–880 species) covering much of the continent. Can you imagine living in an area where there are 500 species of fish in your fresh water streams and lakes? So what did the United States look like? Three shades of blue ranging from 1 species to 250 species (eastern areas) were shown.

The next page made the rate of deforestation in the world clearly visible. The Amazon area was surprisingly, not the worst. Great swaths of the far northern hemisphere, world-wide, are losing forests at the rate of 1.5 to 2.85% per year. These boreal forests are getting lots of attention because they are critical to Earth’s climate and ability to sequester carbon.

Turning the page, Into the Wild mapped human accessibility by terrestrial ecoregion. I have never seen that kind of map before! A team member who worked on this map, Michael Jennings, noted, “I was surprised by the Congo. You can get into an awful lot of the Congo. I think that might have to do with how long humanity has lived there. On the other hand, I am encouraged by the condition of New Guinea. There’s still a lot of remote country there.”

Increased human accessibility is directly related to the decline in biodiversity of species. Though the United States has some richly biodiverse areas (even our own Appalachian Mountain region), it was obvious that we have lost much of that across the country. Still, there were two notable areas, one in the southwest and one in the northern Rockies near Canada that are remote and could benefit from attempts to

preserve them.

The final map was awesome. The salt marshes of the world formed neat edge borders around all the continents. In varying shades of green and yellow they depicted salt marsh abundance worldwide. [Ed. note: see illustration below]

But there is a problem. As the Conservancy’s Mark Spalding pointed out, “We reviewed hundreds of references, but there are still gaps.” In spite of the importance of these ecosystems as biological, ecological and cultural treasures, they have not been well documented. The effort to find elusive information made clear the vast work yet to be done.

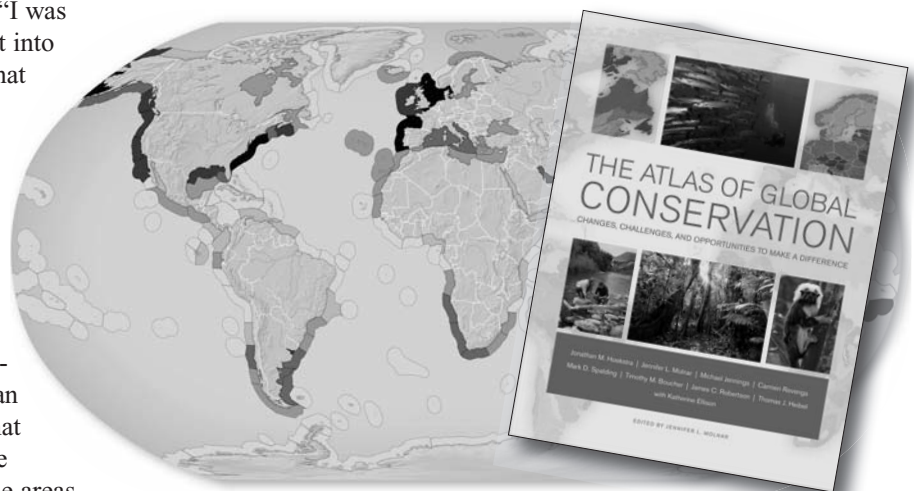
The map, however, is especially meaningful for those of us living near the east coast of America. Our coastline, from Nova Scotia to Florida, is richly abundant with salt marshes. Our challenge is to take good care of them so they can continue to provide shelter, feeding grounds, and nurseries for many species, to filter pollutants and to buffer inland areas from storms.

The kind of information available to us through the *Atlas of Global Conservation* creates an opportunity to see our natural resources from a new perspective. As more and more incoming data fill these maps in the months and years to come, scientists and citizens alike will be able to make more meaningful decisions with regard to conservation priorities.

Knowing the condition of natural resources in our own geographical region in relationship to those of the Earth as a whole, should deepen our human experience and hopefully our stewardship of the planet.

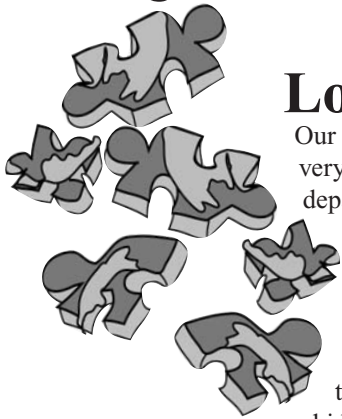
*On the Web:* You can explore interactive versions of select maps from the Atlas at [nature.org/atlas](http://nature.org/atlas). The site also serves as a portal to the entire suite of data compiled in this monumental effort, according to the magazine.

Melodie Anderson-Smith



*This Map of global salt marsh abundance is one among many specialty maps in the Atlas of Global Conservation.*

## Missing Pieces Institute Faculty Loses Four...



### Loses Four...

Our Institute staff has been very stable for years—no departures, just the pleasure of seasonal interns coming and going within our ranks.

Imagine our sadness to learn that three of our talented colleagues were to bid us adieu by the end of last

spring's school program season, and another must step down in April 2013.

Full-time employment opportunity invited three of them to travel down new professional paths. The fourth is called away by family changes, including a first grandchild. Though we miss their presence daily, we are happy for them and wish them all the best.

**Nancy Hall** (nature name “Breeze”) is an accomplished certified teacher and she will be missed. She will be leaving us in April 2013. Nancy has been the anchor of the Institute’s *Lifesavers of the Chesapeake Bay* program for fourth grade students. She has also been a mainstay of the other upper elementary science programs, as well as a long-time instructor for the after-school program, *WaterStriders* for students grade six and up. Nancy has also been part of our outreach team, conducting off-site “science night” exhibits and demonstrations for regional schools.



*Nancy Hall supervised the Water-Striders display during Earth Day last spring.*

Fellow staffers agree that watching Breeze teach is a most inspiring lesson. Gentle in character and demeanor, she draws students into discovery with her skillful questions and her warm encouragement. Seizing an opportunity to allow a student’s curiosity (or her own) to guide learning, Nancy makes the most of those teachable moments that occur spontaneously in our outdoor settings.

Nancy has agreed to return at the start of the 2013 spring program season to help train those who will step into her teaching assignments. She will also continue to help with *WaterStriders* through April. Her life will be busy in the upcoming months as she has a new grandchild in Virginia, where her mother also lives, and five other grown children adding to rich family gatherings. In addition,

Nancy teaches piano lessons in her home to a growing number of students.

We thank Nancy so much for all she has contributed to the life of Renfrew Institute. We also thank her husband Jim and the entire Hall family, especially her son Elet who has spent many volunteer hours helping with *WaterStriders*, fixing our hand carts and doing trail clearing and preparations for the *Discovering Wetlands* program. We look forward to keeping in close touch with Nancy and her family into the future.

**Stephanie Kober** (nature name “Fire Fly”) has been our most colorful teacher extraordinaire—always smiling, always sparkling! Stephanie, a certified elementary teacher, was hired primarily as an early childhood educator to teach RI’s youngest students in both environmental and cultural history programs.

In addition to her busy schedule teaching those programs, she was a primary developer of the cultural history program for kindergarten, *Once Upon A Farm*. Every kindergartener in both Waynesboro and Chambersburg school districts, plus St. Andrew and other regional schools (more than 900 children) now participate in this program annually. We are grateful to Steph for her important work in bringing this program to life.

Steph is known for her excellent teaching skills and an outgoing personality that won her devoted fans throughout the schools and community during her time on our staff. Her role as lead teacher for the institute’s summer program, *Nose to Nose with Nature* established Fire Fly as the one to look for at the park. With her silver sparkle cap and leopard print field boots, Fire Fly kept little ones laughing and learning, while tag-along adults marvelled at her talents.

With equal skill, Stephanie beautifully interpreted the 1800s when she donned period clothing to lead kindergarteners through *Once Upon A Farm*, or first graders into the world of dairy culture on the Renfrew/Royer farmstead of 200 years ago.

Steph has taken a full-time position as assistant manager at the Nautica Outlet in Hagerstown. She is enjoying the world of retail fashion, but she admits that she really misses teaching with us.

We thank Steph for bringing teaching excellence and a spirit of fun to our staff. We count on her to continue her job of prodding us into after-work gatherings. We also thank Steph’s family—husband Rob, and children Gracie and AJ for their involvement over the years in RI events, and for being such avid fans of Renfrew Institute.



*Stephanie Kober holds onto her hat while teaching the Once Upon a Time program in period dress.*

**Pam Rowland** (nature name “Crinkleroot”) played a strong role at RI over the past 13 years, teaching in both environmental and cultural history programs. She stepped down as a faculty member following our 2012 spring season to accept a teaching position with the Gettysburg Montessori School. That assignment began during the summer of 2012 and is full-time.

We are delighted that Pam has agreed to stay on with RI as Four-square Garden Volunteer Coordinator. This is a very important position, newly created with the opening of the relocated and expanded garden. The success of the garden has been insured through Pam’s leadership and knowledge as a master gardener, along with the expertise of garden director and scholar, Dr. Doris Goldman.



*Cabbage Patch Kids: Pam Rowland, right, joined students in the four-square garden’s cabbage patch during the Summer Institute program, Down a Garden Path.*

Pam’s background in public education, environmental education and curriculum development brought professional expertise to RI as we evaluated and revised programs over the years. She was especially helpful as we created new interpretations of the four-square garden and improvements in several of the environmental programs including *Trail of Trees*, *Lifesavers of the Chesapeake Bay* and *Discovering Wetlands*.

Pam is a master teacher, well known in educational circles for her skills and rapport with students of all ages. She brings enthusiasm and energy to every program session. Her upbeat, positive approach leads to good learning experiences for students, with “fun” included. She has touched many through her work with RI, her continuing work with her church and consulting projects in environmental and science education.

We also thank Pam’s husband, Bruce for his support through the years and his assistance with science equipment and methods for our environmental programs. Bruce teaches science at Carlisle High School. Pam and Bruce are also accomplished musicians and have added musical fun during staff social gatherings. We hope that will continue!

**Lori Schlosser** (nature name “Thunder Hawk”) has lived up to her moniker. She has been our in-house expert on raptors, especially owls.

Lori is a very accomplished certified teacher. Her warm and effective rapport with students and her ability to bring humor into her teaching earned her ongoing accolades from visiting teachers to our school programs.

Lori taught most of our environmental programs. Her previous experience in environmental education and

her natural talent as an outdoor instructor made her a perfect fit for our staff.

In addition to teaching with us, Lori has been our athletic, outdoors woman—skilled with a hammer, comfortable with a chain saw and never afraid to tackle a downed tree or blocked trail.

Lori brought resources and problem-solving skills to every outdoor facility challenge. When the wetland teaching area needed clearing and improvement, Lori was there with her power equipment and physical skills to make student access possible. She recruited cable spool tables from the power company, installed a barn owl box (15 ft. up) in a tree, constructed the wooden borders for the new four-square garden beds and fixed many a garden cart tire.

Lori left our staff at the end of the spring season to take a full-time position in health education at the Waynesboro Area Middle School.

Though the position is only for one year, it may be extended, or another position may open for her. We are happy that Lori will continue to lead RI’s adult/teen and family owl walks. And we know that the middle school has gained a superb addition to its faculty staff. We wish her all the best.

We also thank Lori’s family, Eric (husband), Sarah and Kurt for the many hours they have devoted to working at Renfrew, as volunteers helping with institute events and programs and as “park-keeping employees” (Sarah and Kurt) for Renfrew Museum, mowing and tending these beautiful park landscapes.



*Lori Schlosser teaches students about the nine parts of nature during the institute’s school program, Sidney’s Wonder Web.*

Melodie Anderson-Smith



*As we bid farewell to Nancy, Steph, Pam & Lori, we welcome two new staff members. See article on page 32.*

## Renfrew Institute Staff Gains Two...

This year, we at Renfrew Institute were sad to bid adieu to four long-time faculty members. [Ed. note: see article on page 30]

Such a loss required a pretty quick assessment of staffing needs, new opportunities for those remaining, potential new staff recruits and intense program training during the remaining spring season.

We were fortunate to have one newly certified teacher (and long-time volunteer) “in the wings” and another master teacher (and recent RI graduate intern) about to retire from Waynesboro Area School District. Both agreed to join the RI teaching staff.

**Dorothy Fawks** (nature name “Fox”) joined the staff mid-spring 2012. Dottie jumped right into programs, learning quickly, and was ready to take on a full five-day schedule by the fall of 2012.

Dottie has been a volunteer *Summer Stories* reader for RI for many years. She has also helped with *Pumpkin Fest* (carving and painting pumpkins) and with *Youth Festival*. We welcome her to our staff!

**Kathy Seiler** (nature name “Blue Heron”) had knowledge of our programs from her 2010 spring semester with RI as a graduate intern.

At that time, Kathy took a sabbatical from teaching at Waynesboro Area Senior High School to earn a master’s degree in Geo-Environmental Studies at Shippensburg University. She then returned to teaching with WASD, before retiring as of June 2012.

Kathy joins former WASD colleagues and RI staffers Sherry Hesse and Bob North. Both taught with her at Hooverville Elementary in the 1980s. Welcome Kathy!

### THREE CROWS

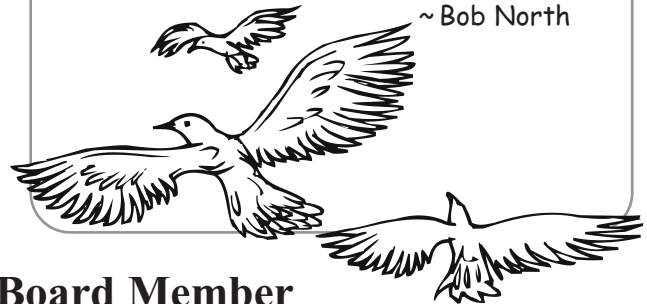
Three crows made a difference,  
Near the end of a weary day  
Off to the side along the way.  
Raucously cawing: caw, caw!

One high on a tippet,  
Another on a branch lower down,  
The third, smaller, on the ground.  
Caw, ca-caw, caw!

The one down low,  
Like an old crone  
With hands on hips,  
Began bobbing up and down  
Urging, nagging, threatening  
The grounded youngster, unattending:  
Caw, caw-ca-caw, caw-ca-caw!

Fly, get away, save yourself!  
He, looking around, flew,  
Yanking, winging into the blue.  
The other two spilled from the tree  
To join him, finding solace in the air,  
Leaving me different, smiling there.

~ Bob North



## Renfrew Institute Welcomes New Board Member



The institute welcomes Sarah Klink to the 2012–13 Board of Directors.

Renfrew Institute is pleased to welcome Sarah Klink to the board of directors. A Waynesboro native, Sarah grew up visiting Renfrew Park with friends, family and later, her children.

Sarah’s two children also enjoyed Renfrew Institute programs at each grade level. Sarah “went along as often as I could,” she said.

With an affection for the park and for Renfrew Institute, Sarah said she was pleased to be asked to join the board. “It was an opportunity for me to give back to the community,” she said. “I enjoy the history of the park, and I wanted to be a part of it.”

Sarah is serving on the Membership Committee, Youth Education Committee and the Salamander Scramble 5K Committee.

“The Scramble is of special interest to me because my husband and I have done the Firecracker 5K in the past,” Sarah said. “We try to train for and run in a couple of races a year, so I am especially looking forward to working with the Scramble.”

Sarah is a registered dental hygienist with Cornerstone Family Dentistry. She and her husband, Mark live in Waynesboro with their daughter, Alyson, an eighth grade student at Waynesboro Area Middle School. Their son, Ethan attends Lebanon Valley College.



## Departing Board Members

Each year we have board member turnover. This is healthy for any organization and Renfrew Institute's bylaws require that directors step down at the end of their second three-year term.

Sometimes a director will choose to step down after one term of three years. And occasionally we have directors who must leave mid-term for career-related or personal reasons. This year we have three departures, all mid-term. We are very grateful for the time they have spent with us and we wish them all the best as they head down new paths.

### Caroline Dean

Caroline served on the board for nearly six years. Many of you know that she moved into a new position as business manager in the Fairfield Area School District last year. With that transition from Waynesboro Area School District to Fairfield, Caroline had her hands full.

In addition, she learned that school board meetings in Fairfield are on Mondays, the same night as RI board meetings. Regretfully, Caroline decided to step down from our board.

During her time with the institute Caroline served on the Adult/Teen Education Committee, the Finance Committee and the Bay Supper Committee. Her enthusiasm and cheerful help at meetings and events was infectious. We have really missed her resourcefulness and good ideas. She has also been an ambassador for the Institute and its programs, spreading our news throughout the educational community.

We are happy to report that at the 2012 Bay Supper, Caroline expressed how much she misses being involved with the institute. She asked if she could return to the supper's planning committee for 2013.

Thanks Caroline, for your past service, and for your offer to come back to help again. It will be wonderful to see you at the Bay Supper planning table as the first meeting launches in February!

### Steve Graham

Steve has served on the board for approximately four years. He stepped in first on November 17, 2008 to fill Tom Singer's unexpired term. He continued into his own 3-year term, which began July 1, 2011.

With regret, Steve has decided to step down this fall as his volunteerism is taking him in new directions.

We have been very lucky to work with Steve over these years. As a retired zoo director (Detroit Zoo) Steve is an avid environmentalist and conservation champion.

He has a lifelong passion for history and antiques and his generous donations of farmstead tools, baskets, wooden bowls and much more have enriched the institute's interpretive programs greatly.

Steve served on the institute's Nominating/Governance Committee, Membership Committee and Bay Supper Committee. In addition, Steve served on Renfrew Museum & Park's REC board (Renfrew Executive Committee) until his recent departure from that position.

We are grateful to Steve for his continued (and recently renewed) support as a co-sponsor of the environmental education program *Discovering Wetlands*. Every sixth grade student in the Waynesboro area participates

in the program along with occasional visiting classes from the region, 500–650 students annually.

We are pleased that Steve will be a featured speaker for Renfrew Institute's 2013 three-part adult/teen lecture series entitled, "CONSERVATION: Challenges in a Changing Environment" this spring.

Thank you Steve, for your dedicated service and for your commitment to the institute's educational programs.

### Phil Kelly

When it comes to solar energy, Phil Kelly is our guy. Not surprising that he also brought lots of organizational energy to the RI board of directors over the past three years. We are very sorry to see him go.

However, the good news is that Phil's own company, Millenium 3 Energy, is doing well and has been keeping him so busy that he regretfully had to step down from RI board service in November 2012.

Phil served on the Adult/Teen Education Committee, the Facilities Committee and the Recycle/Reuse Yard Sale fundraiser committee. He has generously supported RI's annual Earth Celebration Day & Festival of Art in April as a co-sponsor for the past two years and has pledged to do so again in 2013.

Phil's interest in RI's educational programs and his passion for conservation and innovative energy technologies have been a perfect fit. He was also an ambassador for the institute, carrying our message to the business community in the Hagerstown area where his company is located.

Happily, we will see Phil when the yard sale event rolls around in April. He has promised to continue to help as our "Donut Dude," responsible for fetching an order of Krump's donuts early on event day and delivering them to the institute's food stand for sale to vendors and the public.

In his resignation letter he wrote: "And please, please don't forget to send me an invitation to the Bay Supper!"

We wish Phil all the best in his business and family life going forward.

Melodie Anderson-Smith

*Election of new board members  
is on April 15, 2013.  
See notice on page 39.*

# Institute: Organization & Volunteers, January 1–December 31, 2012

## BOARD OF DIRECTORS

(effective July 1, 2012)  
 Maxine Beck, *President*  
 Wayne S. Martz, *Vice President*  
 Patricia A. Shew, *Treasurer*  
 Debi Duffey, *Secretary*  
 Rochelle L. Barvinchack  
 Jeremy Bowersox  
 Terry Eisenhauer  
 Steve Graham  
 Matt Gunder  
 Phil Kelly  
 Sarah Klink  
 Jason Levick  
 Tim Parry  
 Lucinda D. Potter  
 Dave Secor  
 Anne M. Shepard

## ENDOWMENT TRUSTEES

Lynn MacBride (Chr.)  
 Christopher Richwine  
 M. James Rock

## STAFF

(effective July 1, 2012)  
 Melodie Anderson-Smith, *Executive Director*  
 Sherry Hesse, *Director of Cultural Studies*  
 Tracy Holliday, *Assistant Dir./Grants Administrator*  
 Beverly McFarland, *Accounts Manager*  
 Andrea Struble, *Director of Public Relations*  
 Dorothy (Dottie) Fawks, *Faculty*  
 Doris Goldman, *Faculty*  
 Nancy Hall, *Faculty/WaterStriders Instructor*  
 Robert J. North, *Faculty*  
 Pamela Rowland, *4-Square Garden Volunteer Coordinator*  
 Kathy Seiler, *Faculty*  
 Beth Skroban, *Faculty*  
 Nora Slick, *Faculty*

## Interns (Spring 2012)

Eric McGilliard (Geo-Environ. Studies, SU)  
 Sean McNally (Geo-Environ. Studies, SU)

## Intern (Summer 2012)

Hannah Becker (Geo-Environ. Studies, Graduate Intern, SU)

## Accounting Consultant

Ray Miller, CPA

## Educational Programs & Office Assistance Volunteers

Pat Heefner  
 Mary Ann Payne

## COMMITTEES

(effective July 1, 2012 with recent updates)

### Adult Education Committee

Pat Heefner (Chr.)  
 Maxine Beck  
 Leonora Bernheisel  
 Garrett Blanchet  
 Terry Eisenhauer  
 Phil Kelly

Marge Kiersz  
 Lanny McClure  
 Tom McFarland  
 Tim Parry  
 Anne Shepard  
 Andy Smetzer  
 Brian Toro

### Development Committee

Debi Duffey (Chr.)  
 Rochelle Barvinchack  
 Jeremy Bowersox  
 Terry Eisenhauer  
 Wayne Martz  
 Lucinda Potter  
 Dave Secor  
 Pat Shew

### Executive Committee

Maxine Beck (Chr.)  
 Wayne Martz  
 Pat Shew  
 Debi Duffey

### Facilities Committee

Wayne Martz (Chr.)  
 John Beck  
 Phil Kelly  
 Lucinda Potter

### Finance Committee

Pat Shew (Chr.)  
 Debi Duffey  
 Tim Parry  
 Dave Secor

### Historian

Mary Ann Payne

### Membership Committee

Jason Levick (Chr.)  
 Jeremy Bowersox  
 Marge Griffin  
 Matt Gunder  
 Carol Ann Henicle  
 Sarah Klink  
 Edward A. Miller  
 Anne Shepard

### Nominating/Gov. Committee

Matt Gunder (Chr.)  
 Dudley Keller  
 Jason Levick  
 Edward A. Miller  
 Linda Zimmerman

### Personnel Committee

Maxine Beck (Chr.)  
 Wayne Martz  
 Pat Shew  
 Debi Duffey

### Technology Committee

Marc Desrosiers  
 Pat Heefner

### Youth Education Committee

Vacant (Chr.)  
 Bonnie Bachtell  
 Rochelle Barvinchack  
 Sarah Klink  
 Pamela Rowland  
 Pat Shew

### YOUTH AFTER SCHOOL/ WEEKEND/SUMMER

### PROGRAMS & PRESENTERS

### Children's Summer Stories

Dorothy Fawks  
 Laura Fawks  
 Kathy Bourdeau

### Heritage Crafts

Jack Handshaw–*Pottery*  
 Susan Matson–*Basketry*  
 Hannah Becker–*Intern*  
 Sherry Hesse–*Staff Coordinator*

### Digging Isn't Everything

Scott Parker–  
*Archaeologist/Instructor*  
 Hannah Becker–*Intern*

### Down A Garden Path

Doris Goldman–*Staff Instructor*  
 Pam Rowland–*Staff Instructor*  
 Hannah Becker–*Intern*

### Nose-To-Nose With Nature

Stephanie Kober –*Staff Instructor*  
 Beth Skroban–*Staff Instructor*  
 Hannah Becker–*Intern*

### WaterStriders

Melodie Anderson-Smith  
 –*Staff Instructor*  
 Nancy Hall–*Staff Instructor*  
 Doris Goldman–*Staff Biologist*  
 Elet Hall (Supervisor at Earth Day)  
 Kendra Berkebile  
 Amy Draper  
 Brittney Mazie  
 Jackie Rosenberger  
 Ian Skroban

### COMMUNITY EVENTS

### VOLUNTEERS & PRESENTERS

### Spring Bird Walks & Trips

Jack Olszewski, Leader  
 Pete & Carol Bailey

### Annual Kite Fly

George Adams  
 Sam Adams

### Earth Celebration Day & Festival of Art 2012

Amber Naugle, *Artists & Environmental Exhibits Coordinator, Festival Banner*  
 Laura Danyluk, *School Exhibits Coordinator*

Yvonne Yoder, *School Exhibits*  
 Debbie Geis (Children's Art Activity)

Maxine Beck (RI Board president, received county proclamation)

### Environmental Exhibits:

- Alliance Chiropractic Wellness Center/Hundred Fold Farm (Leonard Mazza)
- Alliance for the Chesapeake Bay (Rebecca Wertime)
- Antietam Watershed Assoc. (Bob Lawn)
- Appalachian Nursery (Tom & Fern McCloud)
- Blue Frog Soaps (Mary Hudzinski)
- Chesapeake Bay Foundation (Stephanie Eisenbise)
- Conococheague Institute (John Stauffer, Cindy Fink)
- Energy Options (Vertis Bream)
- Flower Buds & Antietam Watershed Assoc. (Judy

- Bricker & Maggie Cisar)
- Franklin Co. Beekeepers (James Bruckart)
- Franklin Co. Commissioners (David Keller/Chr., Bob Thomas, Bob Ziobrowski)
- Franklin Co. Conservation District (Tammy Piper & Donna Hayes)
- Franklin Co. Master Gardners (Linda Secrist)
- Franklin Co. Planning Commission (Sherry Clayton & Rochelle Barvinchack, Casey & Dale)
- Franklin Co. 4H Therapeutic Riding Center/author (Stephanie Corum)
- Franklin Co. Watershed Assoc. (Tammy Piper & Donna Hayes)
- Franklin Renewable Energy Assoc. (Wayne Mackey)
- Fulton Center for Sustainable Living (Chris Mayer/students)
- Hagerstown Honda (Jeff Knepper, Andrew Puckett)
- Hundredfold Farm (Gretchen Plotkin)
- Little Antietam Creek, Inc. (Scott Parker)
- Long's Tree Service (Florine & Russell Long)
- Minerals & Fossils (Tom Smith)
- Natural Alternatives (Susan Stempien)
- Penn State Cooperative Extension (George Hurd)
- Quincy Township Park Committee (Diane Keeney)
- Strawberry Hill Nature Preserve (Kay Deardorff)
- Summitview Environmental Club (Yvonne Yoder & students)
- Synergy Massage & Wellness Center (Annalee Bentz & Barbara Yeinger)
- Trego Mountain Nature Center (Dina Spanomanolis)
- Tri-State Astronomers (Andy Smetzer & Dan Kaminski)
- WaterStriders (Kendra Berkebile, Amy Draper, Brittney Mazie, Jackie Rosenberger, Nancy Hall/instructor)

### Festival of Art

- Eve & Richard Adkins (Garden Path Pottery)
- Elaine Ambrose (painting)
- Gary Anderson (Iron Intentions Forge)
- Stacey Barger (Custom Wall Art & Murals)
- Mary Alice Baumgardner (author/artist)
- Jacqueline Bayer (jewelry & visual art)

(continued on page 35)

## Organization & Volunteers *continued from pg. 34*

Denny Bingaman  
(wildlife photography)  
Becky Dietrich (Presenter,  
Environmental Artistry  
Award)

Judy Diller  
(recycled materials art)

Matt Elden  
(Wire Edge Creations)  
Arthur and Sara Gernand  
(hypertufa planters)

William Hammann (scherenschnitte & lathed bowls)

Jodi Iskra (Heart J Creations)

Emma Lewis & Justin Baker  
(hypertufa planters, slate art,  
plants)

Elaine Longenecker (basketry)  
Gina Lyter

(GL Designs/jewelry)

Michael McIntyre  
(FireRobin Farm Pottery)

Anita Pfeuffer  
(Scherenschnitte)

Carol Rinehart

(Momentary Art Cards)

Sally Sawyer (author)

Patric Schlee (Earthsong)

**General Volunteers (Earth  
Day/Art Festival)**

Ashley Eminizer

Harleigh Evans

Cheyenne Koons

Mary Ellen Selvaggio

Nitika Sharma

Nicole Simmers

**Youth Festival 2012**

Kathy Bourdeau (Co-chair)

Kim Sheffler (Co-chair)

Traci Walizer (Co-chair)

Beth Angles

Cookie Beck

Maxine Beck

Monica Beck

Kathy, Henry & Lucy  
Bourdeau

Valerie & Toy Dudash and  
their friend, RJ

Preston Dunn

Sheila & Brian Eyler

Dottie & Laura Fawks

Patty Hills

Emily Ledden

Tom McFarland

Jill Morningstar

Amber Naugle

Anita Pfeuffer

The Sheffler Family

Peg Wagaman

The Walizer Family

Waynesboro Children's

Theatre Troupe

**Jazz Festival 2012**

Andrew Sussman

(Chair/Jazz Consultant)

Steve & Maxine Beck

Debi & Greg Duffey

Pat Fleagle

Emma Lewis & Justin Baker

Matt Gunder

Donna & Tony Haugh

Jason Levick

Wayne Martz

Bev McFarland

Ed Miller

Amber Naugle

Conrad Naugle

Tim Parry

Dave Secor

Anne Shepard & Patrick

Minnick

Pat & Richard Shew

Sally Sussman

**Halloween Storytelling**

Jennifer Vanderau, *Teller*

Maxine Beck

Debi Duffey

Nora Slick

**FUND-RAISING EVENTS**

**Earth Day Recycle/Reuse**

**Yard Sale 2012**

**Committee Members:**

Debbie Pflager (Chair)

Sandy Beaumont

Phil Kelly

Allie Kohler

Denny Koons

Richard Mohn

Bonnie Rhodes

Sue Von Rembow

David Secor

Linda Zimmerman

**Volunteers:**

Bonnie Bachtell

Rochelle Barvinchack

Sandy & Rob Beaumont

Maxine Beck

Kay Deardorff

Marc Desrosiers

Debi & Greg Duffey

Denny & Katie Koons

Jason Levick

Emma & Justin Lewis

Lynn MacBride

Wayne Martz

Cathy Mentzer

Amber Naugle

Alice Noll

Candy Norris

Bill & Debbie Pflager

Mary Ellen Selvaggio

Anne Shepard

Richard & Patricia Shew

Barb Smith

Jo Spigler

Sara & Neil Yost

Judy Zafft

**Chesapeake Bay Supper 2012**

[PLEASE SEE COMPLETE LIST

OF BAY SUPPER VOLUNTEERS,

PATRONS AND SPONSORS, PAGE 6]

**Salamander Scramble 5K Run**

**Team Salamander 2012:**

Melodie Anderson-Smith

Lucas Baumgardner

Ashlyn Beck

Maxine Beck

Monica Beck

Ryleigh Beck

Stacy Beck

Tom Beck

Michelle Benchoff

Michael Bercaw

Bea Bocalandro

Jeremy Bowersox

Wayne Buhrman

Stephen Bui

May Cao

Carolyn Carbaugh

Ali, Bob, Tim & Jack Correll

Wayne Driscoll

John Economos

Lynn Economos

Jordan Green

Tracy Holliday

John, Kody & Tiffani Kelley

Daryl Lehman

Emily Kriechbaum

Diana & Greg Lyon-Loftus

Kenneth Lopez

Bobby Mai

Luke & Hanna Manning

Addison Miller

Mary Schull Miller

Abram, Andrew, Joel, Abigail,

Issac, Levi & Kristie Moats

William Pflager

Erica & Nicholas Price

Dustin, Davin & Donovan

Sanders

Lori, Kurt & Sarah Schlosser

Kathy Seiler

Beth, Fred & Ian Skroban

Vicki Stinebaugh

Rod Teach

Benjamin Thompson

Quang Tran

Lisa Ulrich

Arlene Unger

Jared, Eric & Bonnie Weisbrod

**Salamander Scramble**

**Committee:**

Jeremy Bowersox (Chair)

Rochelle Barvinchack

Luke Baumgardner

Bob Correll

Stephen Bui

Sarah Klink

Beth Skroban

Fred Skroban

Tracy Holliday (Staff)

**Salamander Scramble**

**Volunteers**

Rochelle & Peyton Barvinchack

Hanah Beker

Michelle Benchoff

Lori & Abigail Eigenbrode

Ashlyn Shockey

**Pumpkin Festival 2012**

**Committee Members:**

Debbie Pflager (Co-Chair)

David Hykes (Co-Chair)

Bonnie Bachtell

Grace Baylor

Garrett Blanchet

Terry Eisenhauer

Jason Levick

Wayne Martz

Alice Noll

Tim Parry

Lucinda Potter

Anne Shepard

Pat Shew

Linda Zimmerman

AARP South Chapter

Melodie Anderson-Smith

Antietam Ford Tractor

B Equip, Inc./Frank Beckner

Beth Baer

Morgan Baese

Hunter Bakner

Linda & Terry Barkedoll

Kayla Baughman

Luke Baumgardner

Beverly Bautista

Sandy Beaumont

Brian Beck

Cookie Beck

Marie Beck

Maxine & Steve Beck

Hannah Becker

Lacey Bennett

Richard J. Berklite

Leonora Bernheisel

Lindsay Besecker

Myrna & John Binkley

Andrew Bowser

Nancy Brown

Alfred Brubaker

George & Marty Buckley

Doug Burkholder

Sidney Calhoun

Charlotte Carbaugh

Megan Carson

Ryan Cernicky

Lisa Cesa

Deandra & John Coleman

Anne & Bill Conrad

Susan & Frank Conway

Carol & Rich Cool

Kim Cordell

Ali Correll

John Curfinan

Brianna Dade

Megan Daley

Joey Daniels

Andrew Denisenko

Debi & Greg Duffey

Sawyer Duffey

Emily Elden

Judy Elden

Denise Esser

Peggy Etter

Dottie Fawks

John & Jean Frantz

Fay Friel

Barbara Gallagher

Briana Gamero-Cheney

Garden Club of Waynesboro

Barbara Gaydick

Mark Gayman

Doris Goldman

Charlene Good

JoAnn Gruber

Nancy Hall

Roger & Jean Harbaugh

Donna Haugh

Pat & Jay Heefner

Kathy Helfrick

Carol Ann Henicle

Greg Henry

Monty Henry

Karen Herald

Dick & Joann Hersh

Sherry Hesse

Earl Hixon

Brittany Hoffman

Tracy Holliday

& Kevin Ledden

(continued on page 36)

## Organization & Volunteers

*continued from pg. 35*

Kirsten & Jack Hubbard  
& Jake Martin  
John & Connie Huet  
Tia Huff  
Claire Hunter  
Carla Hurley  
Diane Hykes  
Ruby Hykes  
Bonnie Iseminger  
Ivy Hill Farm/John, Jean  
& Steve Martin  
Susan Jackson  
Jenna Kauffman  
John, Tiffany & Kody Kelley  
Marge Kiersz  
Phyllis King  
Martha Baylor Kirby  
Sarah & Alyson Klink  
George Kirk  
C. David Layman  
Eli Leggett  
Donna Levick  
Emma Lewis  
Judy Lininger  
Kelly Marjarum  
Ann Markell  
Gene Martin  
Joice Maurer  
Jean McBride  
Alice McCleaf  
Tyson McClellan  
Lanny McClure  
Barb McCracken  
Bev McFarland  
Cathy Mentzer  
Katy Mercer  
Brianna Miller  
Ed & Ann Miller  
Red & Wendy Mohn  
Amber Naugle  
Owl's Club of Waynesboro  
Stephanie Palme  
Joe & Trudy Palughi  
Karen Papouschek  
Judy Papoutsis  
Paul's Country Market  
Martin's Food Store  
Anita Pfeuffer  
Bill Pflager  
John Poniske  
Amanda Poole  
Lizah Polle  
Judy Purnell  
Renee & Luke Preso  
Virginia Rahn  
J. D. Rinehart/Rinehart  
Orchards  
Mary Rocks  
Rachel Rotz  
Andy & Maggie Rovelstad  
Susan Royer  
Dade Royer  
Karla Rupp  
Amra Saric  
Kyle Schoeneberg  
Beth Schuurman  
Kathy Seiler  
Richard Shew  
Dannan Sites  
Beth & Fred Skroban  
Bonnie & Stephen Smith  
Harold Smith

Katrina Snyder  
Taylor Sprengle  
Imani Starr  
Eunice Statler  
Doug & Debbie Stine  
Lynnae Stine  
Connor Stoops  
Erin Stoops  
Andrea Struble  
Louanna Sturm  
Colin Swain  
Caroline Tassone  
Trista Taylor  
Destiny Thomas  
Jessica Thomas  
Norman Vickery  
Sue VonRembow  
Pam Wagner & Ned Brown  
Dottie Walter  
Chastity Wantz  
Angela Grove Weagly  
Kayla Webb  
Waynesboro College Club  
Darlene Weddle  
Judy & Craig Weltenien  
Greg White  
Kathy Wible  
Kirk Wishard  
Kierane Worsham  
Sarah Young  
Bob Zimmerman

*Thanks  
to all, we  
couldn't  
do it  
without  
you!*

## ¡Muchas Gracias! to Helping Hands



The institute is fortunate to have so many friends willing to make contributions of time and talent that enhance the ways in which we are able to work and fulfill our mission.

We are grateful for all of the generous volunteers and "helping hands" that keep us going strong!

### *Many thanks to the following...*

- ...to **Pete & Carol Bailey** for "filling in" as leaders for the 2012 spring Saturday morning bird walks.
- ...to **Mike Cannady** for tilling the flax patch last spring.
- ...to **Jacob & Zachary Diehl** for help in the office preparing materials for kindergarten program, *Earthseekers* in late winter, 2012.
- ...to **Elet Hall** for helping our teaching staff with preparations to launch the spring school program season. Elet repaired garden carts and various other tasks.
- ...to **Andy Rovelstad** for building a wheel-chair accessible planting table for the 4-square garden.
- ...to **Brittney Mazie** and **Kurt Schlosser** for washing sit-upons following the 2012 spring program season.
- ...to **Mary Ann Payne** for continuing work on the institute's archives, *EarthSeekers* awards, star necklaces for first grade program *Marvin Visits Earth*, and other program related tasks.
- ...to **Pat Heefner** for her assistance with preparation of school program registration materials

## Helping Us Grow

Thank you to the following for financial donations toward a variety of items, programs and general support.



- **Jackie Bayer:** In support of the 2012 *Earth Celebration Day & Festival of Art*
- **Maxine Beck & Marie Lanser Beck:** Portion of proceeds from sale of their book *Royers of Renfrew, A Family Tapestry*
- **Marie Lanser Beck:** Return of honorarium for speaking engagement (Adult/Teen Education). [NOTE: Co-presenter Maxine Beck is a board member, so does not receive an honorarium. Thanks to both authors for their donation of time & expertise!]
- **Arthur & Sara Gernand:** In support of the 2012 *Earth Celebration Day & Festival of Art*
- **Carolyn Smith:** In support of the 2012 *Earth Celebration Day & Festival of Art*
- **Synergy Massage & Wellness:** In support of the 2012 *Earth Celebration Day & Festival of Art*
- **Natural Alternatives & Health Foods:** In support of the 2012 *Earth Celebration Day & Festival of Art*

## Late Winter/Spring 2013 Calendar of Events

All events supported in part by Today's Horizon Fund contributors:  
APX Enclosures, Inc., The Carolyn Terry Eddy Family: Carolyn,  
with daughters Connie Fleagle & Kim Larkin; and the Nora Roberts Foundation.

### Annual Spring Lecture Series

#### **Conservation Challenges in a Changing Environment**

Thursdays, March 7 & March 21, and April 4 at 7 p.m.

Visitors Center, Renfrew Park, Waynesboro

Underwriting support in part by Charles & Undine Warner

• **1st Lecture**—Thursday, March 7, 7 p.m.

Stephen O'Phillips—"Invasive Exotics in the Natural Landscape"

• **2nd Lecture**—Thursday, March 21, 7 p.m.

Steve Graham—"The Role of Zoos in Conservation Efforts"

• **3rd Lecture**—Thursday, April 4, 7 p.m.

Adrienne Sussman—"The World of Crows: Why Save One Species on a South Pacific Island?"

Detailed lecture information is on our *Adult/Teen Education flyer*, available at [www.renfrewinstitute.org](http://www.renfrewinstitute.org)

#### **Astronomy Program—"There is a Tide in the Affairs of the Universe: How Gravity Shapes the Cosmos"**

Thursday, February 21, 7 p.m.

Visitors Center, Renfrew Park, Waynesboro

Underwriting support provided by Marge Kiersz, and by Center Square Real Estate Settlement Services, Inc.

Dr. Larry Marschall, Gettysburg College physics professor discusses tides, and the profound affects they have on earth and in the universe. For example, the shapes of galaxies, the rings of Saturn, and the most active volcanoes in the solar system are produced by the same sort of tidal effect that we see on Earth. In cooperation with Tri-State Astronomy Club. Free.

#### **Creatures of the Night: Owl Walk for Adults/Teens**

Thursday, March 14, 6 p.m.

Meet at Visitors Center, Renfrew Park, Waynesboro

Underwriting support provided by Marge Kiersz, and by Center Square Real Estate Settlement Services, Inc.

Naturalist Lori Schlosser conducts this outdoor walk to areas of Renfrew Park likely to attract owls. A brief pre-walk information session included. Ages 15 & up. Free, pre-registration required. Limit 50 participants.

#### **Telescope Clinic**

Saturday, March 16, 2013, 10 a.m. to 2 p.m.

Visitors Center, Renfrew Park, Waynesboro

Underwriting support provided by Marge Kiersz, and by Center Square Real Estate Settlement Services, Inc.

Renfrew Institute, in partnership with the Tri-State Astronomers Club, is hosting a "telescope clinic" designed to help those interested learn how to maximize their use of a telescope. Free, but registration is required. Bring your own telescope.

#### **Renfrew Rocks! Geology Seminar & Field Trip: "From Sea to Shiny Minerals"**

SEMINAR: Thursday, March 28, 7 p.m.

FAMILY FIELD TRIP: Sat., May 4, 8:30 a.m.–6 p.m.

Underwriting support provided by Marge Kiersz, and by Center Square Real Estate Settlement Services, Inc.

In partnership with the Franklin County Rock & Mineral Club. Presented by geologist, Jeri Jones.

SEMINAR: Learn about the role of the sea in the rocks of South Mountain & the Frederick Valley, & the important minerals that were extracted for our benefit. Free.

FAMILY FIELD TRIP: Explores South Mountain & the Frederick Valley. Fossil sites included. Transportation via bus only, provided. Pre-registration required. Fee: Adults (age 15 & up) \$30; children (age 7-14, with paying adult) \$15. RI member discount: \$5 per seat (adult or child). Bring bag lunch.

### Bird Walks at Renfrew

Saturdays in April & May, 7:30–10 a.m.

Naturalist Jack Olzewski leads bird walks along the hiking trails at Renfrew Park. Walks begin at Renfrew's lower parking lot off Welty Road. Participants should wear comfortable walking shoes and may bring identification books and binoculars. Free.

#### **Watershed Program (Topic TBA)**

Thursday, April 11 • 7 p.m. in Visitor Center

In partnership with Antietam Watershed Association

Claire A. Jantz, PhD, Associate Professor in Shippensburg University's Dept. of Geography-Earth Science will present a program on a watershed-related topic. Free.

#### **Annual Fun Fly**

Saturday, April 13, 10 a.m.–4 p.m.

Underwriting support provided by Buchanan Auto Park

Free kite flying (all ages) with expert flying help, in the meadow behind the museum house at Renfrew Park. Bring your own kite.

#### **8th Annual Recycle/Reuse Earth Day Yard Sale**

Saturday, April 27, 9 a.m.–3 p.m.

Underwriting support provided by sponsors TBA

Combined with Earth Celebration Day. Rent a space at Renfrew Park, bring your own table and sell off your discarded "stuff"—make extra cash for yourself, your family or your organization.

#### **Earth Celebration Day & Festival of Art**

Saturday, April 27, 11 a.m.–4 p.m.

Underwriting support by Angela Grove Weagly & others TBA

Celebration of spring with environmental exhibits, music, student clothesline display & more. At the *Festival of Art* area artists will display, demonstrate, and sell their works. Supervised art activities for children. Free.

#### **Geology Field Trip**

Saturday, May 4 • 8:30 a.m.–6 p.m.

See description in March 28 entry, above, for Renfrew Rocks!

#### **Not All Archaeology is Digging:**

##### **Exploring the Covenanter Cemetery**

Saturday, May 11 • 9 a.m. to 12 noon [raindate May 18]

Use modern archaeological techniques to learn about the historic cemetery in Renfrew Park, including non-intrusive research, site topography & more. Presented by archaeologists Scott Parker & Doug Stine. Ages 15 & up. Fee: \$20 for RI members, \$25 non-members.

#### **An Evening with Ed: History of Renfrew Restorations**

Thursday May 16, 2013 7:00 p.m.

More details to come on this talk by Ed Miller.

#### **Adult Fly Fishing Workshop—Beginner**

Saturday May 18 or 25 (to be determined)

9 a.m.–12 noon, Visitor Center

Presented in partnership with Antietam Fly Anglers

Learn about equipment, casting techniques and the "secrets" of fly-fishing. Led by instructors from Antietam Fly Anglers, this workshop launches you into this popular sport. Practice equipment available. Fee: \$20 for members of Renfrew Institute, for \$25 non-members. Pre-registration required. Ages 15 and up. Participants ages 10–15 considered if with an adult registrant.

#### **Youth Festival 2013**

Sunday, May 26, 1–5:30 p.m.

Underwriting support provided by Susquehanna Bank

A celebration of youth with workshops, demonstrations, activities, exhibits and entertainment. Full day of fun for kids. Admission is free. Pre-registration for workshops.

## Members & Sponsors *continued from page 19*

### Organization Exchange

The Accokeek Foundation  
Alliance for the Chesapeake Bay  
Antietam Fly Anglers  
Antietam Watershed Assoc.  
Conococheague Institute  
The Discovery Station  
Franklin Co. Planning  
Commission  
Franklin County Master  
Gardeners  
Franklin County Rock  
& Mineral Club  
Little Antietam Creek, Inc.  
Nicomemus Center for  
Ceramic Studies  
Renfrew Museum & Park  
TriState Astronomers  
Strawberry Hill Nature Center  
Waynesboro Historical Society

### Student

(\$10)

Elinor Borrell  
Jack Hubbard

### SPONSORS

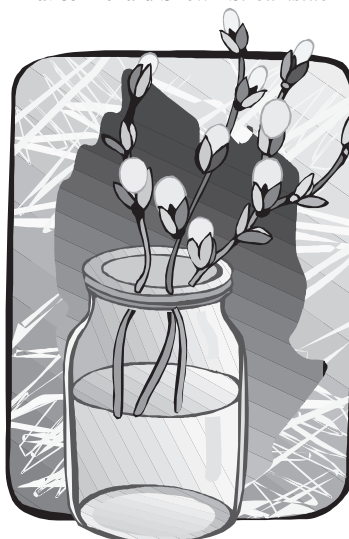
#### 2011-12 AND 2012-13

APX Enclosures, Inc. -  
*Today's Horizon Fund*  
Advance Auto Parts -  
*Recycle/Reuse Yard Sale*  
Advanced Financial Security,  
Inc. - *Chesapeake Bay Supper  
Fundraiser*  
Antietam EYE Associates -  
*Recycle/Reuse Yard Sale*  
Clint Barkdoll/Center Square  
Real Estate Settlement Services  
*Adult/Teen Education*  
Bartlett Tree Experts -  
*Trail of Trees*  
Steve & Maxine Beck -  
*Nose to Nose with Nature*  
Beck Manufacturing, Inc. -  
*Discovering Wetlands*  
Leonora Rocca Bernheisel  
(Mary's Delight Farm) -  
*Wool Culture, Royer Legacy  
& Faculty Chair*  
Bonded Applicators, Inc. -  
*Royer Legacy*  
Buchanan Auto Park -  
*Annual Fun Fly (kite fly)*  
Drs. Stephen Bui & May Cao -  
*Salamander Scramble*  
Cinetic Landis Grinding Corp./  
Fives Group - *Jazz Festival*  
Cornerstone Family Dentistry  
- *Salamander Scramble*  
Corporate Office Properties  
Trust - *Discovering Wetlands*  
Craig, Friedly, Potter & Moore  
Insurance - *Discovering  
Wetlands*  
Custom Sign Studio -  
*From Field to Table*  
Denny's Garage - *Chesapeake  
Bay Supper Fundraiser*  
Drexel University - *Trail of Trees*

Dru's Books N' Things -  
*Recycle/Reuse Yard Sale*  
Greg & Debi Duffey -  
*From Field to Table*  
Carolyn Terry Eddy Family:  
Carolyn, with daughters  
Connie Fleagle & Kim Larkin -  
*Today's Horizon Fund*  
Eichholz Flowers - *Salamander  
Scramble*  
F&M Trust Co. - *From Field to  
Table, Wake Up Earth, It's Spring*  
First Energy/West Penn Power -  
*Chesapeake Bay Supper  
Fundraiser*  
Foreman's Rare Coins -  
*Chesapeake Bay Supper  
Fundraiser*  
Franklin Co. Visitors Bureau -  
*Jazz Fest*  
Franklin Co. Rock & Mineral  
Club - *Special sponsorship  
support, Adult/Teen Education*  
Nancy Erlanson & Don Gibe -  
*Lifesavers of the Chesapeake  
Bay*  
Steve Graham, in memory of  
Virginia Steck Graham -  
*Discovering Wetlands*  
Grove-Bowersox Funeral Home -  
*Fall Walk & Salamander  
Scramble*  
Hadley Farms Bakery -  
*Recycle/Reuse Yard Sale*  
Hamilton Hyundai - *Jazz Fest*  
Hamilton Nissan - *Jazz Fest*  
Pat & Jay Heefner - *Once Upon  
a Farm & Dairy Culture*  
Hoppers - *Earth Celebration  
Day & Festival of Art*  
Johnson Controls, Inc. *Lifesavers  
of the Chesapeake Bay*  
William & Kathleen Kaminski  
- *Fall Walk*  
Marge Kiersz - *Adult Education  
Lectures & Workshops*  
Dennis L. Koons of Raymond  
James Financial Services -  
*Streamside*  
Land O'Lakes Mid-Atlantic  
Grants Program Foundation -  
*Dairy Culture*  
Doris R. Large, in memory of  
J. Warren and Jessie O. Large  
- *Park Ranger Training  
Program, Earth Encounters*  
Lochstampfor Funeral Home -  
*Streamside*  
M & T Bank - *Four Squares:  
Pennsylvania German  
4-Square Garden, Pumpkin  
Festival*  
Manitowoc Crane Group -  
*Home Sweet Home*  
Martz Plumbing, Heating &  
AC, Inc. - *Streamside*  
Chet & Betsy Mauk - *Bay  
Supper Fundraiser*  
Mercedes Benz of Hagerstown  
- *Four Squares: Pennsylvania  
German 4-Square Garden*  
Rick Meyers/The Runner's Sole -  
*Salamander Scramble*

Millennium 3 Energy - *Earth  
Celebration Day & Festival  
of Art*  
R. Thomas Murphy &  
Associates, PC - *Salamander  
Scramble*  
David Neterer/Sterling Financial  
Management - *Recycle/Reuse  
Yard Sale*  
The William & Diane  
Nitterhouse Foundation -  
*Once Upon a Farm*  
Noelker & Hull Assoc. Inc. -  
*Chesapeake Bay Supper  
Fundraiser*  
Patricia O'Connor -  
*Streamside*  
The Orchards - *Jazz Festival*  
PA Humanities Council -  
*Adult/Teen Education*  
PA Partners in the Arts -  
*Jazz Festival*  
Patriot Federal Credit Union -  
*Halloween Storytelling*  
Betsy Payette - *Flax Culture*  
Mary Ann Payne, in memory  
of Helen Herr Moyer -  
*Wonderwalks for Preschool*  
Lucinda D. Potter, CPA -  
*Sidney's Wonder Web &  
Streamside*  
RaceWax.com LLC - *Fall Walk*  
Edna Rice Estate - *Marvin  
Visits Earth*  
Bernie & Rosemarie Roberts,  
in memory of Harry D. Catts  
& Richard G. McGowan, Sr. -  
*Earth Encounters*  
The Nora Roberts Foundation -  
*Today's Horizon Fund*  
Jeff & Kelsey Rock - *Lifesavers  
of the Chesapeake Bay*  
Rotary Club of Waynesboro -  
*Wake Up Earth, It's Spring*  
Savage Family Pharmacy -  
*Bay Supper Fundraiser*  
Dave & Tawnya Secor -  
*Salamander Scramble*  
Sheetz, Inc. -  
*Once Upon a Farm*  
Pat & Richard Shew - *Streamside*

Dr. & Mrs. Ronald F. Shultz -  
*Chesapeake Bay Supper  
Fundraiser*  
Anne Shepard & Patrick  
Minnich - *Summer Institute:  
Not All Archeology is  
Digging*  
Law Office of Anne M.  
Shepard - *The Royer Legacy*  
State Farm Insurance Co. -  
*Chesapeake Bay Supper  
Fundraiser*  
Dr. John Stauffer - *Flax Culture*  
Susquehanna Bank - *Youth  
Festival & Dairy Culture*  
Total Vac - *Recycle/Reuse  
Yard Sale*  
Quang & Tammie Tran/Mes  
Reves - *Salamander Scramble*  
TruCut Lawn & Landscape  
LLC - *Salamander Scramble*  
V.F.W. Post 695 - *Streamside*  
WACCO Properties, Inc. -  
*Salamander Scramble*  
Walmart Foundation -  
*Flax Culture*  
Charles & Undine Warner -  
*Adult/Teen Education Lecture  
Series*  
Ed & Marcia Warren, Mother  
Martin's Coupons - *In-kind  
support, Recycle/Reuse Yard  
Sale*  
Waste Management Inc. -  
*Water Striders* (after school  
program)  
Waynesboro Beneficial Fund  
Association - *Office  
Technology Upgrade Project*  
Waynesboro Area Education  
Association - *Fall Walk, From  
Field to Table*  
Waynesboro Lions Club -  
*Discovering Wetlands*  
Angela Grove Weagly, in  
memory of Joyce Grove  
Ceyler & in honor of  
Richard D. Ceyler - *Earth  
Celebration Day & Festival  
of Art*



### Pussy Willows

Close your eyes  
And do not peek  
And I'll rub Spring  
Across your cheek...

~Aileen Fisher



Alyssa, Fairview Elementary student and budding naturalist, holds maple seeds from a Norway maple. Alyssa found the seeds last October, during the first grade environmental program, *Fall Walk*. Photo by Tracy Holliday.

***“Every leaf speaks bliss to me  
Fluttering from the autumn tree.”***  
~ Emily Brontë

### **Membership Meetings Announced Renfrew Institute Election Meeting:**

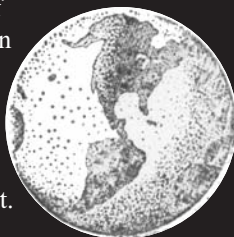
Monday, April 15, 2013 • 6:30 PM • Visitors Center  
Institute members in good standing are invited to participate in the election of new board members. The slate of candidates has not been finalized as of this printing, but will be available upon request prior to the meeting. Call 717-762-0373 or email to: [info@renfrewinstitute.org](mailto:info@renfrewinstitute.org) [NOTE: Suggestions for future nominees can be made by contacting a member of the Nominating & Governance Committee.]

### **“Annual Meeting” will be on:**

Monday, July 15, 2013 • 6:45 PM • Visitors Center

### **RENEWAL REMINDER:**

Please check the back page of this newsletter. If you see a green Earth Stamp (like the one shown here), that means you have not yet renewed your membership for 2012–13. Please do...we need your support.  
**Thanks!**



## **WELCOME New Members!**

Note: New members sponsoring specific programs are listed under *Gifts—New Sponsorships* on page 7.

Brooke & Terry Althouse	Roger Klink
Bartlett Tree Experts	Emily Kriechbaum
Sterling & Barbara Buzzell	John & Joyce Lefebure
Carolyn Carbaugh	Alyce S. McCoy
Patrick J. Clady	R. Thomas Murphy & Associates, P.C.
Cornerstone Family Dentistry	David Neterer~Sterling Financial Management
Drexel University	The Orchards Restaurant~Michael Kalathas
John Economos	Drahas & Andrea Oslik
Lynn Economos	Joanne Rook
Eichholz Flowers	St. Andrew the Apostle School
Lisa Ulrich & Jordan Green	Benjamin Thompson
Margie A. Griffin	Arlene Unger
Sharon Gunder	VFW Post 695
Kevin & Olivia Hammond	Eric, Bonnie & Jared Weisbrod
Hoppers	
Kirsten & Jack Hubbard	
William J. & Karen S. Hudson	

### **RENFREW INSTITUTE BOARD OF DIRECTORS**

Maxine Beck, *President*  
Wayne S. Martz, *Vice-President*  
Patricia A. Shew, *Treasurer*  
Debi Duffey, *Secretary*  
Rochelle L. Barvinchack  
Jeremy Bowersox  
Caroline Dean  
Terry Eisenhower  
Steve Graham  
Matt Gunder  
Jason Levick  
Tim Parry  
Lucinda D. Potter  
Dave Secor  
Anne M. Shepard

### **RENFREW INSTITUTE STAFF**

Melodie Anderson-Smith, *Executive Director*  
Sherry Hesse, *Director of Cultural Studies*  
Tracy Holliday, *Assistant Director/Grants Administrator*  
Beverly McFarland, *Accounts Manager*  
Andrea Struble, *Director of Public Relations*  
Dottie Fawks, *Faculty*  
Doris Goldman, *Faculty*  
Nancy Hall, *Faculty/WaterStriders Instructor*  
Robert J. North, *Faculty*  
Pamela Rowland, *Garden Volunteer Coordinator*  
Kathy Seiler, *Faculty*  
Beth Skroban, *Faculty*  
Nora Slick, *Faculty*

## Our Wish List...

- ❖ Book: *The Founding Gardeners* by Andrea Wulf
- ❖ Book: *Architecture and Artifacts of the Pennsylvania Germans* by Cynthia G. Falk, Penn State University Press, 2008. [Donor may wish to contribute \$45 to Renfrew Institute and staff will purchase this book.]
- ❖ Scissors—adult size, office quality (up to 4 pairs)
- ❖ Additional underwriting sponsors for this newsletter, educational programs or community events
- ❖ Clipboards, standard size (up to a dozen)
- ❖ Wire sign holders (from election or ad signs)

## Wish List “Thank You”

- ❖ **Liz & Bill George:** Book—*Eastern Bird Nests* (Peterson Field Guide) by Hal H. Harrison.
- ❖ **Jo & Bill Spigler:** Book—*Planting the Wild Garden* by Kathryn O. Galbraith, illustrated by Wendy A. Halperin.

## Beyond the Wish List... Thank You, Too!

- ❖ **Jen Atkinson & Family:** Empty Girl Scout cookie boxes for kindergarten program, *Once Upon a Farm*.
- ❖ **Judy Elden:** Ice cream bucket with lid.
- ❖ **Dottie Fawks:** Books—*Crabby’s Water Wish*, *Pearly Oyster*, *Charlie Clownfish & Annie A*, all 3 by Suzanne Tate; *The Seashore Book* by Charlotte Zolotow.
- ❖ **Steve Graham:** Book: *The Frogs & Toads of North America* by Lang Elliot, Carl Gerhardt & Carlos Davidson (includes CD with recorded frog calls). The following equipment for use in farmstead programs: linen show towel, hank of flax, bobbin from an old flax wheel, flat basket. Additional assorted books & field guides.
- ❖ **Lowe’s of Waynesboro:** Donation of flowers for summer program, *Down a Garden Path*.

- ❖ **Lester Martin:** Donation of 2 hand made primitive brooms he crafted himself.
- ❖ **Clay “Cookie Man” Moyer:** Donation and delivery of Pepperidge Farm cookies for intermission refreshments at Jazz Festival.
- ❖ **Karen Manderson:** Fabric scraps for quilting activity during kindergarten program, *Once Upon a Farm*.
- ❖ **Conrad Naugle:** Empty tea jugs for use in the 4-square garden. Bungie cords, PVC pipe and his time to mount festival banner at events.
- ❖ **Angela Rocks:** Books—*Chesapeake Bay: A Field Guide*, by Christopher P. White; *Migratory Birds* by Vladimir Bejcek; *Susquehanna River Birding & Wildlife Trail*.
- ❖ **Linda Swartz:** Baby food jars for dairy culture program.
- ❖ **Maxine Beck and Marie Lanser Beck:** Donation of the 2nd book of their 3-part series, *The Royers of Renfrew: Threads of Change*.
- ❖ **Rick Shindle:** Empty gallon milk jugs for *Wool Culture* school program.
- ❖ **Wayne Martz:** Heavy duty step stool, new faucet for office sink
- ❖ **Leonora Bernheisel:** Inkle loom for textile programs.

## Oops! Omission from last issue:

- ❖ **Mary & Matt Harsh (Chesley Vegetable Farm):** donation of vegetables for the September 2011 and 2012 Garden Volunteer Appreciation Dinner held at Willow Pond Farm in Fairfield, PA (see *Streamside*, Vol. 22, No. 1, pg. 28 and article on pg. 28, this issue).

# Streamside

Renfrew Institute for Cultural and Environmental Studies  
1010 East Main St. Waynesboro, PA 17268 (717)762-0373

[www.renfrewinstitute.org](http://www.renfrewinstitute.org)

It's not too late to renew your membership for 2012-13!

An “Earth Stamp” here means we’re missing you from this year!

Non-Profit Org.  
U.S. Postage  
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Waynesboro, PA  
17268  
Permit No. 045

