

THE RIVER RUNS



INSIDE THIS ISSUE:

- Ø From the President
- Ø Executive Director's Corner
- Ø Water Resource Stewardship: *Vernal Pools*
- Ø SPECIAL REPORT: *Atlantic Coast Pipeline*
- Ø Annual Meeting Announcement
- Ø Outdoor Education: *Local Schools*
- Ø Member Memorial: *Stewart Bryan*
- Ø Dates to Remember
- Ø THANK YOU to our Members
- Ø Join or Renew Membership

Cover Photo Credit:
Swimming Hole
by Natlie Krovetz.

Her image appeared in an email blast back in February, and also on the Feb 22 cover of the *Heirlooms Gazette* in Clifton Forge.

Board of Directors (2015-16)

Officers:

Monroe Farmer, President

Ann Warner, Vice President

Anne McVey, Secretary

William Jones, Treasurer

Directors:

Lucius Bracey

Caryl Cowden

John Fowler

Bill Hardbarger

Marshall Higgins

Stewart Hobbs

Nelson Hoy

Dick Lynn

Christopher Peters

Steve Van Lear

Joe Wood

Staff:

Mike Hayslett

Executive Director, Editor

Elizabeth Biggs, Accountant



From the President

Greetings Members,

Well how quickly things change in our lives and certainly that holds true for the CRPA. Dominion Resources in early March announced they were changing the route of the Atlantic Coast Pipeline into Bath County from Highland County. This change immediately affected more of our members and overnight negatively impacted Bath County.



Nelson Hoy (Education Committee Chair) has represented the CRPA for over 20 months in opposition to the effect this pipeline construction could have on the Cowpasture River. He has submitted outstanding position papers to the Federal Energy Resources Commission (FERC) and the U.S. Forest Service (USFS) based on sound science. In addition, Nelson was one of the founders of the Allegheny Blue Ridge Alliance (ABRA). Therefore, the CRPA was one of the first ABRA members.

To meet this larger threat, the board has once again turned to Nelson by forming an additional committee under his leadership solely dedicated to representing our members against this continuing assault on the Cowpasture River. In addition to Nelson, the committee members are: Caryl Cowden, John Fowler, Bill Jones (Treasurer), Steve Van Lear (Membership Committee Chair) and Ann Warner (VP). I can assure you this group of dedicated people will do everything possible to stop this pipeline and keep our river clean.

I am pleased to report to you that the membership committee is integrating a more effective information management system under the direction and through the efforts of Chairman Steve Van Lear. The committee consists of, in addition to Steve: Lizzie Biggs, Caryl Cowden, Ann McVey (Secretary) and Ann Warner (VP). The goal is to increase information getting to you from your board.

The education committee is making contact with schools in Allegheny, Bath and Highland Counties. The committee members are Nelson Hoy (Chairman), Kathy Farmer, Mike Hayslett (Executive Director), Kim Manion and Dave Peters. The CRPA is presently providing river monitoring experiences to one school and support to another school. We hope to involve two more schools soon. I am particularly pleased the CRPA is able to bring clean water awareness to young students through our river labs and support of school programs.

My special interest is our Monitoring Committee chaired by Roger Baroody, who together with his wife, Cynthia, literally cover the entire river. They perform the water chemistry tests at all the stations and are station managers for four stations. In addition to Roger and Cynthia, the committee members are: Norm Bell, Sara Bell, Al Cleveland, Mike Crowther, Liz Devenny, Kent Ford,

Continued next page...

Bill Jones, David Kirk, Kim Manion, Bill McNown, Polly Newlon, Dave Peters, Jeff Perdue and Mike Whiteside. These dedicated people are the year round protectors of the Cowpasture River. They are truly the unsung defenders of the river we love.

This is my last greeting to you as president. The summer installment of *The River Runs* will introduce your new president. I have met a group of great people this year, worked with dedicated river guardians, learned a lot — and for this, I thank you. It has been an honor to have served as your president. On behalf of the CRPA and myself, thank you for being a member.

Puggy

Executive Director's Corner

Hello Everyone,

Ah, Spring at last! After enduring the long, cold “hibernation” of winter, it’s always a treat for me to emerge and feel the rejuvenation of spirit that returns with the first signs of spring. Early flowering elements like trout lily and serviceberry trees, the first songbirds returning from the tropics, and of particular pleasure for me is the surge of amphibian activity, as these lowly animals march from the woods to wet places and fulfill their reproductive mission. It’s the **vernal** season, and certain frogs, toads, and salamanders are the first wildlife to parade their approval. Spring is a busy season for a naturalist and especially for an amphibian biologist!

In March, I made my 19th annual trek to Northern Virginia, to continue a partnership with conservation groups like our own in the mission of raising awareness for wetlands and their wildlife. I also spent the last month exploring these soggy haunts here in my own home region of the Alleghenies.

Some CRPA members have directed me to “new” sites to explore, and I never met a wetland I didn’t like! These often under-appreciated habitats support an incredible array of life, and they’re a first focus of Nature after the snows have thawed. I’m talking about “vernal pools”, and you can learn about these special environments through my article on the subject in this issue. Enjoy (and let me know if you have such a wetland you wouldn’t mind exploring together).

Spring also brings a renewal in energy and resolve to do the work of conservation and advocacy for the natural resources we cherish. With the proposed Atlantic Coast Pipeline threatening our mountain and headwaters region, we’re channeling that seasonal energy to mobilize and make our message heard: We **Protect the Things (We) Love!** This issue has a special report on this disturbing threat to our region’s natural, cultural, and economic heritage. Please do your part to oppose this outside threat to our precious watershed.

I do hope that y’all have plenty of opportunities to enjoy the outdoors this Spring season... with time to walk trails, admire wildflowers, watch birds, trout fish, and get ready to float and swim! I can hardly wait myself to get the old kayak back on the river. Come paddle with us!

Mike



Photo © 2012 by Brian Gratwicke

Spring Pools & Pollywogs: Rare Wetlands of the Cowpasture River Watershed

By Mike Hayslett, Vernal Pool Ecologist & Conservator

Among the important surface and ground-water resources of the region is a poorly known, underappreciated, and often abused little wetland type known as a “vernal pool”. Some locals call them “wet weather ponds” – which is not inaccurate – as these seasonal wetlands fill up during the rainy season from fall to winter. They are recharged by early spring rains, then typically dry out by early to midsummer. *Vernal* refers to Spring – the busiest time for these seasonal wetlands – when they team with the breeding activity of early amphibians (salamanders, frogs and toads), “bugs”, and larger predators. These pools are mostly surface water features found in a forest setting; they are at their best health, in fact, when surrounded by woods. These wetland habitats are classified by the state (VDCR - Division of Natural Heritage) as globally-rare natural communities. They often harbor threatened or endangered plants, invertebrates, and amphibians. There are only a handful of these special environments known to remain in the Cowpasture River Valley (CRV) – the author has documented a dozen thus far – and their locations tend to be closely guarded for their protection. These small, ephemeral ponds are delicate environments and easily impacted by ATV’s, littering or poachers. Even well-meaning explorers can inadvertently introduce diseases by their contaminated boots or nets. Many folks have little concern or less sympathy for small, slimy creatures like salamanders, but alas, their influence on the forest as a whole (and within a watershed) is irreplaceable.

Keystone Creatures

Salamanders and frogs eat tons of invertebrates and are eaten by still larger predators like owls, skunks, and snakes. They are an important conduit of energy flowing through their environment. Without this ecological “hinge pin” group, these ecosystems would likely crash. These amphibians are not the only animals of note around vernal pools, however. Innumerable wild animals benefit from the presence of these wild ponds, and these environments provide essential services of food, water, shelter, or space to raise young for most types of wildlife common to our area. A short list would include: deer, bear, turkey, and squirrels; song birds, salamanders, frogs and toads; turtles and snakes, hawks and owls; dragonflies, ducks, beetles, and boatman; scuds and shrimp, and bats! Now, a specialized habitat like this will certainly accommodate specialized creatures, and that’s what makes these wetland types unique. Vernal pools host a suite of *indicator species* known as “obligate fauna” – wildlife that are adapted to using these specific environments in order to complete their life cycle. In our region, this collection of distinctive animals includes four amphibians and a freshwater crustacean: Spotted, Marbled, and Jefferson salamanders (*Ambystoma* species), the Wood Frog, and the Eastern Fairy Shrimp. The four-legged are terrestrial, forest-dwelling amphibians that must use the pool annually to reproduce their own kind. The bizarre fairy shrimp dwells only in the pool – hatching each year from eggs that are laid during the wet phase of the pond. This latter critter is prehistoric and perhaps the most mysterious but distinctive animal representing these ancient wetlands.

Water From Heaven

On the water quality score, *vernal pools* have some of the cleanest water around. Though tea-colored from leaf tannins, the shallow (precipitation driven) waters of these ponds are nearly always clear and free from silting sediments. That’s important for sensitive invertebrates and developing amphibians. Tiny crustaceans provide food for growing salamander larvae (tadpoles), and the fascinating fairy shrimp provide occasional snack for migrating ducks.

Continued next page...



This upland vernal pool in the CRV harbors Spotted & Marbled salamanders, Fairy Shrimp & a thousand Wood frogs! (MH photo)

In the forested sections of the wide floodplain of the Cowpasture River and of some of its tributaries, vernal pools can sometimes be found near the base of the adjoining ridges of the valley. In those situations, tiny wildlife typically migrates down from the upland slopes to mate in the seasonal pools that form in the floodplain. Unfortunately, roads are often located in this same space, and every year these methodical animals must risk traffic that can be fatal to their populations. On the low ridges of the CRV can be found (in very rare instances) swales or “sags”, where ancient vernal pools formed on the collected sediments in these ridgetop depressions. These upland wetlands or “montane depression swamps” (as botanists may call them), are likely the most ancient and rarest type of environmental habitat within the watershed. These “temporary” ponds can often be shown to be 5,000 years old or more! *Temporary* implies that their usefulness is fleeting. *Seasonal* more accurately conveys that they have faithfully been available every year during selected seasons for millennia. Upland vernal pools are the rarest and most precious of these unique surface water features, and the author (known to many across the state as the “leading expert” on the subject) only knows of about 15 within the entire watershed of the Cowpasture River! Compare that to the number of creeks, springs, or caves known in the same region. I have been monitoring some of these sites for over 20 years and beginning this season, am studying floodplain

pools with the permission of accommodating owners along the river.

Think Outside the Basin

Studying these isolated wetlands since boyhood has taught me that watersheds are about so much more than the ribbon of water meandering down through the channel of a stream — that water originates from and is tied to the forests within the watershed from which those waters are derived... just as a vernal pool is not merely a “bowl” of water in the woods. Vernal pool breeders connect the food energy produced there to the surrounding forests! These small wetlands are critically integrated into the watersheds where they may still be found, and they’re deserving of protection.

Conservation Strategies

Consider the following steps: prevent pool pollution; don’t introduce fish into them; avoid excessive access in them; provide an ample buffer of forest surrounding them; and engage the help of other advocates to watch out for their protection. To learn more on the subject see:

- ◆ Virginia’s Vernal Pools www.virginiavernalpools.org
- ◆ Secret Pond: A Fairy Shrimp Documentary <https://vimeo.com/46371816>

SPECIAL ISSUES REPORT: Atlantic Coast Pipeline

Against the Atlantic Coast Pipeline

by C. Nelson Hoy, Chairman of the Ad Hoc Pipeline Committee

WILLIAMSVILLE: The Board of Directors in its March 2016 meeting noted that the Association has conscientiously tracked the progress of the Atlantic Coast Pipeline application before the Federal Energy Regulatory Commission and before the U. S. Forest Service for somewhat over 21 months. In that time frame, the Cowpasture River Preservation Association has contributed to the greater public dialogue science-based analyses on the threats posed by the construction of a 42" in diameter natural gas pipeline in two areas of critical concern – i.e., the erosion of soil, debris and rock in rugged mountainous terrain, and the threats to surface and ground water quality in karst topography. Both water quality issues devolve from the essence of our corporate charter and represent the vital concerns of our membership who are riparian landowners.

Erosion in Rugged Mountainous Terrain: The Federal Energy Regulatory Commission is in receipt of comments from several Federal government agencies and many private non-profit organizations that highlight erosion (and sedimentation) as possibly causing significant environmental impacts. Noteworthy scoping comments on the threats created by erosion were submitted by the U.S. Environmental Protection Agency, the USFS George Washington and Monongahela National Forests, the U. S. Fish and Wildlife Service, The Nature Conservancy, the Sierra Club, the Appalachian Mountain Advocates, the Dominion Pipeline Monitoring Coalition, the Highlanders for Responsible Development, and your Cowpasture River Preservation Association.

The Atlantic Coast Pipeline (ACP), LLC, however, has steadfastly refused to acknowledge that science-based assessments clearly and unequivocally underscore the fact that the erosion by water of soil, debris and rock in the rugged Appalachian Mountains of Virginia represents a significant environmental factor, risk and exposure. The Atlantic Coast Pipeline, furthermore has apparently chosen not to embrace state-of-the-practice and sophisticated computer-based modeling for predicting the erosion of rock, soil and debris in rugged mountainous terrain. While the Federal Energy Regulatory Commission turns a blind eye to a no-science approach and in fact actually encourages the application of dumbed-down rules; the U.S. Department of Agriculture through the U.S. Forest Service has overseen for 30 years the development of the WEPP (Water Erosion Prediction Project) for forest land management applications. Collaborating scientists represent the U.S. Department of Agriculture's Forest Service, Agricultural Research Service and Natural Resources Conservation Service; and the U.S. Department of the Interior's Bureau of Land Management and Geological Survey.

According to the USDA Natural Resources Conservation Service, slopes in these rugged Appalachian Mountains and along the GWNF-6 Alternative Route vary from minor percentages to 90% slopes. So the Cowpasture River Preservation Association, as it did earlier for the original pipeline route through Highland County, ran RUSLE2 Computer Model predictions of the erosion by water of soils in our rugged Appalachian Mountains based upon close approximations of slope gradient, slope length, soil type, rainfall, and vegetation and the Association predicted the amount of sediment delivered as a soil loss and described in tons per acre per year. Holding all variables constant except the "slope gradient" produces the following predictions:

- ◆ With a 10% slope the expected erosion would be 34 tons of soil per acre per year.
- ◆ **With a 30% slope the expected erosion would be 183 tons of soil per acre per year.**
- ◆ With a 50% slope the expected erosion would be 331 tons of soil per acre per year.
- ◆ With a 70% slope the expected erosion would be 454 tons of soil per acre per year.
- ◆ With a 90% slope the expected erosion would be 549 tons of soil per acre per year.

Continued next page...

Please Note: that the GWNF-6 Alternative Route will cross 74 miles of terrain classified as highly erodible by water and 24 miles of terrain classified as **slopes greater than 30 percent**. The CRPA's analyses, therefore, clearly confirms that erosion in these rugged mountains will most likely be catastrophic for the environment and for our rivers, runs and drafts.

Surface and Ground Water Quality in Karst Topography: The Atlantic Coast Pipeline within the last 75 days has proposed a new GWNF-6 Alternative Route without any acknowledgment whatsoever that this route passes through arguably the most sensitive and fragile karst terrain in the Commonwealth of Virginia, passes within two tenths of a mile of the world renown Burnsville Cove a complex of karst sinks and caves which feeds Bullpasture River springs to the northeast, and crosses the sinking Dry Run which feeds Cowpasture River springs miles to the south. The Federal Energy Regulatory Commission at this juncture has failed to give the ACP definitive directions to conduct a professional-level karst survey of the proposed a GWNF-6 Alternative Route, while knowing that the ACP did not complete the karst survey for the original route through Highland County, and further knowing that a professional-level karst survey lies along the critical path to informed decision-making.



Protect The Things You Love: The Upper Cowpasture River in Spring

Erosion and Sedimentation Control Measures: Unfortunately or from an environmental perspective tragically, the Commonwealth of Virginia and its Department of Environmental Quality does not have the financial or manpower resources necessary to implement the most basic and fundamental state-level erosion and sedimentation control regulations that should appropriately govern an industrial scale linear development like the Atlantic Coast (Natural Gas) Pipeline nor does the Commonwealth or its governor have the essential political will to ensure regulatory compliance.

Continued next page...

Secondary Environmental Effects of Sedimentation: The environmental factor (i.e., erosion in rugged mountainous terrain) is linked in a cause-and-effect relationship with several other environmental impacts of cumulative concern. In the Cowpasture River Valley, these secondary concerns include heavy stormwater runoff, river and stream bank scouring, sedimentation in karst terrain features, sedimentation in public and private water supplies, slope failure and landslides in mountainous terrain, debris slides and flows in mountainous terrain, sedimentation of eastern brook trout habitat, degradation of Belted Kingfisher habitat, and sedimentation of clubshell and snuffbox mussels habitat.

Well and Spring Water Monitoring Guidelines: Because neither the Federal or state governments are meaningfully committed to protecting surface and ground water quality, the Alleghany-Blue Ridge Alliance is sponsoring a collaborative research effort to develop practical guidelines for homesteaders, farmers and businesses to monitor water quality of domestic wells and springs. The water quality monitoring guidelines will cover an overview of the risks, exposures and environmental impacts, a description of private sector pipeline monitoring plans, recommendations for monitoring water sources for quality and quantity, and a guide for landowners to consulting and laboratory services for water quality testing. The CRPA is financially contributing to the development of these “Water Quality Monitoring Guidelines”.

Progress is Our Most Important Product: The Association notes that General Electric's marketing tagline in the 1960s was “Progress is Our Most Important Product” and today, the Cowpasture River Preservation Association stands in favor of progress for citizens of the Cowpasture River Valley and for citizens of our great nation. However, when “progress” is defined as an industrial-scale linear development of a 42” natural gas pipeline that will perpetuate both Virginia's and North Carolina's dependence upon burning fossil fuels and that further will be built at the expense of our natural environment; then in our opinion it is both short-sighted and self-serving. Mankind does not learn well from history. The great Maya civilization of Mexico's Yucatan Peninsula collapsed over a thousand years ago because civilization's “progress” out stripped the region's capacity to supply it populations with fresh potable water. In the Southwest United States the Anasazi Indian culture collapsed at its apogee because of that society's failure to foresee drought and water shortages, and its failure to deal effectively with water resource management challenges. More recently, life in Montana's extraordinarily beautiful Bitterroot Valley is being compromised by competing demands for ground and surface waters, and the narrow self-interests of homesteaders, ranchers, farmers, mining companies and forest products companies.

Resolution of the Board of Directors: The CRPA Board of Directors with the above discussion points in mind unanimously voted to protest the apparently orchestrated evasion of the National Environmental Policy Act of 1969 and to unequivocally stand in opposition of the Federal Energy Regulatory Commission under these circumstances granting a “Certificates of Convenience and Necessity” to build and operate the Atlantic Coast Pipeline.

Technical Support for Riparian Landowners: The CRPA Ad Hoc Pipeline Committee has taken several initiatives to support riparian landowners in the Cowpasture River Watershed. Six illustrative initiatives on behalf of the Cowpasture River and the CRPA membership are listed below.

- ◆ The Cowpasture River Preservation Association is a founding member of the Alleghany-Blue Ridge Alliance (ABRA). See: <http://www.abralliance.org/>
- ◆ The CRPA Ad Hoc Pipeline Committee supports the work of the Dominion Pipeline Monitoring Coalition. See: <http://pipelineupdate.org/>
- ◆ C. Nelson Hoy, CRPA Board of Directors supported through ABRA a study of the “Economic Costs of the Atlantic Coast Pipeline”. See: http://www.abralliance.org/wp-content/uploads/2016/02/Economic_Costs_Of_The_Atlantic_Coast_Pipeline-KeyLogic_2-16-16.pdf

Continued next page...

- ◆ The Cowpasture River Preservation Association submitted to the Federal Energy Regulatory Commission four Motions in Protest of the Atlantic Coast Pipeline's Resource Report No. 7 -- Soils. See: http://elibrary.ferc.gov/idmws/file_list.asp?accession_num=20151209-5067
- ◆ The CRPA Ad Hoc Pipeline Committee submitted on March 21, 2016 scoping comments to the U.S. Forest Service on the Atlantic Coast Pipeline's application for a permit to survey the GWNF-6 Alternative Route through the George Washington National Forest. See: http://www.abralliance.org/wp-content/uploads/2016/04/GWNF-6_Scoping_Comments_by_CPRA_20160321.pdf
- ◆ The Cowpasture River Preservation Association is financially supporting a DPMC-sponsored study on monitoring wells and springs at risk due to pipeline construction.

It's All About "Preservation": The Cowpasture River Preservation Association was created in 1972 for the expressed purpose of **preserving** the Cowpasture River and its tributaries. This "Special Issues Report" highlights for our membership and readers how a volunteer organization contributes to *protecting the things we love*.

44th Annual Meeting of the CRPA

Saturday, May 21, 2016 — Camp Mont Shenandoah

- 5:00 pm Beer and Wine Social with Silent Auction
Proceeds from the silent auction will support the CRPA, businesses and artists.
 6:00 pm Business Meeting
 6:30 pm Josh Elliott Catered Dinner Cost = \$20 per person, \$15 children (12 & under)
 7:15 pm Program with Guest Speaker: Joe Lovett, Exec. Director of *Appalachian Mountain Advocates*, non-profit law firm—***Legal Defense of Wild Water Resources***

Please send your reservation form along with checks payable to CRPA by **May 16** to:

CRPA, PO Box 215, Millboro, VA 24460

Or, AT LEAST email your intentions by May 16 to directorcrpa@gmail.com

(We must guarantee our number attending the dinner to the caterer).

Directions: <http://www.campmontshenandoah.com/contact-us/directions-and-transportation.php>

Please print your name (as you wish it to appear on nametag)	Dinner Cost (\$20 adult, \$15 children)
Total	

Outdoor Education on the River

Collaboration with Our Local Public Schools

by C. Nelson Hoy, Chairperson of the Education Committee

Editor's note: The Cowpasture River Preservation Association by the essence of its charter engages in educational activities within the Cowpasture River Valley of Virginia, for the purposes of creating awareness among students, citizens, and officials of the critical need to protect our surface and ground water resources, and of stimulating interest in progressive stewardship.

WILLIAMSVILLE – The Cowpasture River Preservation Association is offering an Outdoor Education experience for students in our local schools including the Alleghany, Bath and Highland County Public Schools. Our outdoor education on the river goals include:

- ◆ To augment the local public schools efforts to implement the state-mandated Meaningful Watershed Educational Experiences (MWEE) in Alleghany, Bath and Highland Counties.
- ◆ To leverage the Cowpasture River Preservation Association's capabilities for sponsoring River Monitoring Laboratories.
- ◆ To create awareness among students and teachers in our local public schools of progressive water resource stewardship.
- ◆ To advance our Association's corporate charter-driven responsibility to promote education.

Chesapeake Bay: In recognition of the Chesapeake Bay Watershed Agreement, signed on June 16, 2014, the Commonwealth is committed to preparing every student with the knowledge and skills necessary to responsibly protect and restore their local watershed. The cornerstone of this environmental goal is rigorous student inquiry coupled with participation in teacher-supported Meaningful Watershed Educational Experiences (MWEE) in elementary, middle, and high school. The agreement also highlights the important role of the jurisdictions in promoting and assisting with the implementation of environmental education, and formally recognizes school divisions and schools as essential partners in the protection, restoration, and conservation of the Chesapeake Bay watershed. See: Chesapeake Bay Program, “The Meaningful Watershed Educational Experience” (Annapolis, Maryland: Chesapeake Bay Program Education Work group), 4 pages. Within the Commonwealth of Virginia, however, *implementation by the local public schools and teachers is on a volunteer basis and without state funding.*

River Monitoring Laboratories: Your Association has been sponsoring River Monitoring Laboratories for several years and under different venues. The CRPA, as an illustration, has sponsored numerous laboratories for our own water quality monitors. We have sponsored three laboratories for forestry students at the Dabney S. Lancaster Community College. A typical plan of instruction for a CRPA River Monitoring Laboratory involves:

- ◆ An introduction to the Cowpasture River Preservation Association, the Cowpasture River Watershed and the Cowpasture River itself.
- ◆ A discussion that covers water quality, sedimentation and other pollutants, and the influence of water quality on plant and animal habitats and upon human beings.
- ◆ A basic exploration of macroinvertebrates as water quality indicators, how to identify these creatures, their pollution tolerances and intolerances, and how to sample them.
- ◆ A demonstration and student practicum of the river specimen collection procedure including the use of hand-held magnifiers, loupe binocular magnifiers, desk-top microscopes, the Save Our streams (SOS) identification charts, and A Guide to Freshwater Invertebrates of North America by J. Reese Voshell, Jr.

Continued next page...



Dabney Forestry Students Identifying Benthic Macroinvertebrates with Microscopes, Loupe Binoculars, and Hand-held Magnifiers During a CRPA-sponsored River Monitoring Laboratory.

Local Public Schools: In calendar year 2016-17, the Cowpasture River Preservation Association will be reaching out to the local public school systems and offering assistance in furthering their Meaningful Watershed Educational Experiences (MWEE) programs. Local public school systems within the Cowpasture River Valley include: Alleghany, Bath and Highland Counties. We are talking with school principals and individual teachers about how our Association's capabilities (and resources) may possibly advance their outdoor watershed education programs. **Note: that we are not talking about an open checkbook to develop and support new instructional programs.**

Importantly, the CRPA River Monitoring Laboratories delivered at the community college level must be adapted for applications at the high school and the middle or elementary school levels. Our adaptation strategy is to use the "Leaf Pack Protocol" developed by the Cary Institute of Ecosystem Studies to permit macroinvertebrate sampling in a student-safe environment. Please see: <http://www.caryinstitute.org/educators/teaching-materials/yes-net-young-environmental-scientists-network/leaf-pack-protocol>.

Tentative Commitments:

- 1) The CRPA supports a River Monitoring Laboratory for high school and middle school teachers as part of a re-certification summer course scheduled by Dabney S. Lancaster Community College thorough its Forestry Department. Roger Baroodly and Puggy Farmer are our lead River Monitors.

Continued next page...

Local Public Schools (continued)

- 2) The CRPA will support a River Monitoring Laboratory that uses the Cary Institute “Leaf Pack Protocol” for the Bath County High School (BCHS) ecology class and the Clifton Middle School (CMS) 7th grade this spring. Our MWEE assistance for the CMS should begin in mid-May 2016 and focus upon issue definition, synthesis and conclusions. Our target group is all 7th grade life science students. The watershed problem idea is to use benthic organisms to compare the ecologic health of Cowpasture and Jackson Rivers. These activities are supportive of several life sciences goals in the public school system. Dave Peters and Mike Hayslett will be our River Monitor instructors.
- 3) The CRPA will support a River Monitoring Laboratory that uses the Cary Institute “Leaf Pack Protocol” for the Millboro Elementary School 4th and 6th grades this spring. Kim Manion is teaching macro-invertebrate identification and correlating macro-invertebrates to water quality. Dave Peters and Kim Manion will be our River Monitor instructors.
- 4) Dave Peters discussed the Commonwealth's “Meaningful Water Education Experience” and the Association's River Monitoring Laboratories with the Alleghany County High School. He plans further discussions in the late spring.
- 5) Dave Peters and Mike Hayslett are planning discussions in the near future with Highland County High School.

Member Resources: The Cowpasture River Preservation Association's primary strength at this juncture is in sponsoring River Monitoring Laboratories where teachers and/or students are introduced to macroinvertebrate sampling techniques. River Monitoring Laboratories draw upon the resources of the CRPA Water Monitoring Committee and the Dabney S. Lancaster Community College, including the following select cadre of volunteers:

Puggy Farmer, Graduate Forester, Dabney S. Lancaster Community College

Kathy Farmer, Retired Mathematics Teacher, Alleghany Public Schools

Mike Hayslett, Assistant Professor of Biology, Dabney S. Lancaster Community College

Kim Manion, Science Teacher, Millboro Elementary School

Dave Peters, Retired Principal and Teacher of the Alleghany Highlands in the Alleghany County Public Schools

Scott Reigel, Assistant Professor of Forestry, Dabney S. Lancaster Community College

Mike Whiteside, Conservationist and Upper Sharon Station Manager

In Summary: Our collaborative outreach program with the public schools is making good progress. We hope to be in action and providing technical support services for outdoor education on the river in the spring and fall of 2016.

The River Runs... across the nation!

The CRPA newsletter (now quarterly) is distributed to 21 states across the U.S. and to the District of Columbia. Not bad for a “local watershed” group in a rural community, huh?

Our members include riverfront owners, their families, and friends of the river from Maine to New Mexico and from Oregon to Florida!

Give a gift membership in 2016 and spread the word about one of America’s cleanest rivers* and the CRPA’s mission of dedication to its conservation and preservation!

Maybe you can add to the list of locales—maybe even take us international.



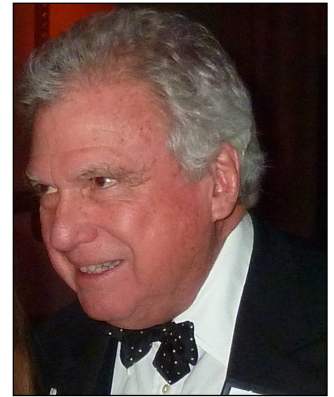
*The Cowpasture River of Virginia is acknowledged as the cleanest river in the Old Dominion.

In Memoriam

Remembering Stewart Bryan — A Friend of the Cowpasture *by Jean Howell*

As many of you already know, John (Stewart) Bryan III, died in January this year. In his professional life, at the time of his death, he was chairman, president and CEO of Media General. But here in Bath County we remember him as our Cowpasture River friend and neighbor. He and his wife, Lissy, bought their farm on the river a couple of miles below Fort Lewis, more than twenty years ago.

Since that time they returned as frequently as their busy lives allowed to get away to River Fields, his 'favorite place'. Stewart loved the beauty and serenity their setting offers, but loved perhaps even more going down on a Saturday morning and catching breakfast for their various friends and associates who had joined them for the weekend. In addition to personal enjoyment, he and Lissy appreciated the importance of protecting the river and its banks. On several different occasions he ordered stream bank restorations to prevent further erosion already caused by the major bend in the river on their property. Without that effort, there certainly would have been even more damage to the bank with increased sedimentation downstream and potential flooding.



Stewart Bryan in Richmond. 2015 photo
courtesy of Anne Adams of *The Recorder*

Over the years, Stewart also supported the CRPA in various ways, perhaps most importantly making a significant contribution to the fund that would permit the organization to hire an Executive Director back in the early 2000's. The decision to fill that position that first time enabled the CRPA to begin in a more focused way to engage in a number of river protection and water quality projects that are continued to this day.

We send our condolences to Lissy, and to his two daughters and five grandchildren.

Dates to Remember

- ♦ **May 21** (Saturday, 5:00 - 8:00 PM): **CRPA Annual Meeting** on the river at Camp Mont Shenandoah will include a Social with Silent Auction, Business Meeting, Catered Dinner and Special Program.
- ♦ **June 11** (Saturday, 9:00 - 12:00): **Training Workshop** on Macro-invertebrate Identification with Kent Ford. Space will be limited. To register, contact Mike at directorcrpa@gmail.com by June 1, 2016.
- ♦ **July 30** (Saturday, 3:00 - 8:00 PM): **Annual Picnic & Family Fun Day** on the river with water activities, games, social & dinner... don't miss this summer fun time!

Explore our Website:

WWW.COWPASTURERIVER.ORG

Thank You To Our Loyal Watershed Members

Includes dues and gifts received since Nov. 1, 2015. **Thanks!** for your continued support and **Welcome!** to our new members. **Total donations for current campaign = \$32,477.00** **Bold names** were received since the winter issue.

Bedrock Patrons

Tom and Patti Watts
Jeanne and Christopher Carter
Kent and Ellen Ford
Tim and Lynn Pistell
Cowpasture Camp, Inc.
Lissy and Stewart Bryan
Carson and Jeff Sullivan
Anne and Jim McVey

Becky, Jennie, and Gene Downs

George Phillips family

Wallawhatoola Society

Cleve and Barbara McGehee
Ann Warner—Camp Mont Shenandoah
Ann Howe and Robert Hilton
Mike and Tricia Christian
Michael Wildasin
Celia and Jim Rutt
Lucius and Pam Bracey
Hope and Nolan Nicely, Jr.
Nellie and Truman Semans

Elizabeth Biggs and Nelson Hoy

Watershed Stewards

Garrett and Penny Gooch
Steve and Kelly Van Lear
Witcher and Elizabeth Dudley
Jean Ann Manner
Bill and Barbara Tavenner
Puggy and Kathy Farmer
Read Lunsford
Roger and Cynthia Baroody
Dick and Glovie Lynn
Chip Snead and Juanita Savage
Tal and Christine Kemper
Caryl and John Cowden
Billy and Susan Frank
Annette S. Kirby
Joan L. Rule
Morrison and Meryl Manner
Van Yahres family
Don Thomson

Headwaters Circle

Polly Hawkes
Mason and Cheryl Simpson
Keven and Cindy Rice
Bill and Nan Mahone Wellborn
William K. Jones and Lee F. Elliott
David Brooks
Marshall and Jane Higgins
Charles Black
Norwood and Susan Morrison
Wayne Cross
David A. Kirk
Anna and Tom Lawson
Doris and John Percy
Dave and Sandra Peters
David and Dawn Russell
Michael Crowder
Rick and Suzanne Miller
Marlibba Farms—David Ray, Jr.
Keturah Bracey and Jay Horine
Allan and Becky Howerton
Carrington L. Pasco
John H. Turner, Jr.
Bill and Christie Hardbarger
Julian “Mac” McLaughlin, Jr.
Angel and Ella Candelaria
Eddie and Sheri Walters

Richard and Rosemary Sutton

Robert C. Watts III

Jeremy and Laura White

Rodney Armstrong - Walnut Tree Farm

John Beach and Jane Lindsay
James and Sarah Redington
Jim English and Trisha Noel
Elizabeth C. Hereford
Patrick and David Higgins
Mead and Stolarz families
Dr. and Mrs. Philip C. Watt
Beverly H. and William E. Wilson
Joe and Kathy Wood
Robert C. and Mina Wood
David P. Brooks
Leighton and Pinky Houck

Ms. Mary Powell—McDaniel

River Guardians

Connie Russell
Anne Doll
Highlander Hunt Club
Paige Pistell Witte
Barbara Newlon
Ann F. Caldwell and Lou Houff
Lois and Gary Johnson
Marc Koslen
Fred and Peggy Paxton
Sally Branch and Roy Simmons
Roland Walters
Elizabeth Van Lear
Al Cleveland
Polly and David Hawkes
Elizabeth and Lloyd Lipscomb
Dick and Jean Miller
Remi Gratton
Dr. Edward Metzger
Percy and Anne Montague
Rachel B. Johnson and
Rev. Carl Pattison
Martha Rule
Mike Goode
Jim and Katherine Morris
Jon and Betsy Lasley
William Lipscomb
Peter and Iris Pistell
WG and Maxine Anderson
Layton Hulette
Dr. George B. Craddock, Jr.
Theodore J. Craddock
Garrett G. Gooch, IV
Stewart B. Hobbs, Jr.
Allan B. Howerton
Frank W. Morrison
Norwood O. Morrison
J. Alexander Owen
Paul T. Owen
John T. Percy, Jr.
Frederick A. Terrell, III
H. Bruce Thomson, III

Thank You To Our Loyal Watershed Members

Includes dues and gifts received since Nov. 1, 2015. **Thanks!** for your continued support and **Welcome!** to our new members. **Total donations for current campaign = \$32,477.00** Bold names were received since the winter issue.

R. Thomas Watts, IV
Robert C. Wood, III
Matt & Linda Cauley
Alice Lancaster Buck
Michael and Marla Whiteside
Anne and Donald McCaig
Bill and Eleanor Washburn
Howard and Nancy Dobbs
C J and Bonnie Nicely
Martha Ruggles
Potomac Hunt Club, Inc.

Individual

Douglas Hopkins Somers
The Steadmans
Eddie Glover
William Hope Zollman
JM Lindsay
Gwendolyn Broce
Dr. and Mrs. John R. Redick
Adam and Katie Grist
Joshua and Edie Hardbarger
Matt and Jessica Reeves
Dimmitt K. Houff
Ann May Shelton
James and Adele Lambiase
E. Bowie Shepherd
Channing M. Hall, III
Patrick Higgins
Dan Miles
Lynda Davies
J. Lesslie Hall, III
Jennifer Hawes
Dee Lobe
Sally Bingley
Larry and Jo Denius
Barbara Keller
Gilbert L. Ramey
Robert Farmer and
Whitney McCuskey
Steve Kijak

Amy Edwards (New Member)
Everette Mays, Jr.
Mike & Dorothy Hayslett (New Member)
Phil and Charlotte Lucas
Wade Evans
Jim LaVier

Junior Members

Liam Enfield
Annalise Enfield
Finn Enfield
Ava Hawkes
Miriam Hawkes
Nicholas White
Natalie White

In Memory of:

Donald G. Arnold
Reis, Nelson, Rachford, & Gooch families

Donna Thomson
of Acworth, GA
by Anonymous Donor

Donna Thomson
by Tom and Patti Watts,
Salem, VA

Donna Peterson Thomson
by David A. Jones,
Lynchburg, VA

Donna Thomson
by Douglas and Alice Lumbard,
Robbinsville, NC

Donna Thomson
by Michael & Catherine Madden,
Lynchburg, VA

Donna Peterson Thomson
by Dr. John and Elizabeth Cottrell,
Maurertown, VA

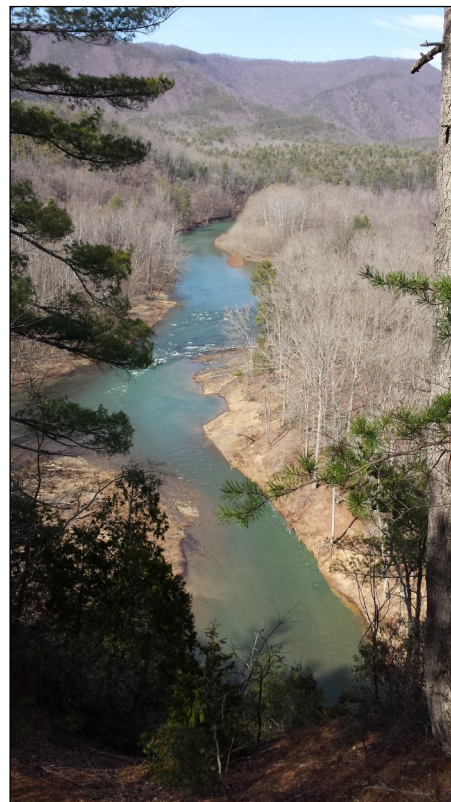
Donna Thomson
by Michael & Catherine Madden,
Lynchburg, VA

Donna Thomson
by Ann Howe and Robert Hilton,
Nashville, TN
Donna Thomson
by Betsy and Jon Lasley,
Millersville, MD

The CRPA's annual campaign runs from
Nov. 1, 2015—Oct. 31, 2016.

Our current campaign is halfway into
its cycle. Dues and gifts received dur-
ing this campaign are essential to the
CRPA being able to carry on its mission
of stewarding the Cowpasture River.
Your support makes the difference!

THANK YOU for supporting the CRPA!



"Peters Bend Overlook"
Photo by M. Hayslett

Did we get it wrong? We're sorry for any errors or omissions in this list.
We are happy to correct errors. Please contact Mike at directorcrpa@gmail.com



Post Office Box 215

Millboro, VA 24460

STANDARD
PRESORT
U.S. POSTAGE PAID
PERMIT NO. 38
DALEVILLE, VA

Protect The Things You Love

Please join us today. The river needs your time, talent and support!

- | | |
|-------------------------------------------------------------------------------|------------------------------------------------------------------------------------|
| <input type="checkbox"/> \$20 Individual (minimum annual membership donation) | |
| <input type="checkbox"/> \$50 River Guardian | |
| <input type="checkbox"/> \$100 Headwaters Circle | <input type="checkbox"/> >\$500 Bedrock Patron |
| <input type="checkbox"/> \$250 Watershed Steward | <input type="checkbox"/> Other _____ (or Memorial) |
| <input type="checkbox"/> \$500 Wallawhatoola Society | <input type="checkbox"/> I am a NEW member! <input type="checkbox"/> I am RENEWING |

NAME(S) As/If You Want Them Published

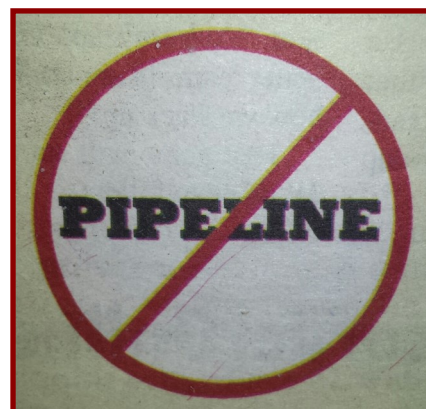
ADDRESS: _____

CITY — STATE — ZIP

PHONE

E-MAIL: _____

- ☐ I prefer to NOT have my name published as a contributor.
- ☐ Please send my newsletter by email version only.
- ☐ I am interested in becoming a volunteer river monitor.



(from CRPA paid add in *The Recorder*)