

Volume 14

Issue 2

Summer/Fall 2010

SHOOTING THE BREEZE

A Publication of Bull Run Mountains Conservancy, Inc.

Natural

By Michael Kieffer

In George Peterken's 1996 book *Natural Woodland* the British naturalist contrasts "original naturalness—the state that existed before people became a significant ecological factor" with "present naturalness—the state which would prevail now if people had not become a significant factor". One must remember that forests are constantly shaped by storms and fire. If a forest is spared human disturbances, over hundreds of years it can become "present naturalness". If people were removed completely and permanently the forest enters its "future naturalness" (Marris, 2008). While not many have adopted this terminology, preferring "virgin" and "old growth" descriptors, Peterken's terms provide a nice conceptual way of looking at our natural areas such as Bull Run Mountains Natural Preserve (BRMNAP).

Based on Peterken's terms, BRMNAP's "original naturalness" was lost with the American Indians' management of the mountains for game and berries through their use of fire. Since the American Indians first contact, BRMNAP has been logged, inhabited, quarried, farmed, and pastured. It has endured acid rain deposition, gypsy moth invasions, and countless plant introductions, many of which have become invasive and detrimental to its native flora. BRMNAP does not qualify for the term "present naturalness" and since people will not be removed completely or permanently the forest will not in the foreseeable future enter into "future naturalness". For that matter, there is no landscape on earth that can qualify for "original, present, or future naturalness" as the entire surface of earth is affected by anthropogenic disturbances.

Virginia Natural Area Preserves, such as BRMNAP, prioritize the management of the natural heritage resources. Natural Area Preserve Management Guidelines (http://www.dcr.virginia.gov/natural_heritage/documents/napmgt.pdf) read, "natural area preserves in Virginia are managed for the objective of providing suitable habitat conditions for the continued existence of rare or declining species of plants and animals, and also to maintain rare and exemplary natural community types". The natural area preserve management guidelines aim "to clarify the reasons for restricting public use and visitation, and to state principles and ideas that guide management of natural areas with the goal that they will perpetually sustain their valuable and vulnerable resources".

It is difficult to reach the goal of perpetually sustaining a preserve's resources without a clear definition of what is natural. However, I propose it is the process of attempting to manage towards "naturalness" that leads to better understanding of ecological functions of forests, grasslands, freshwater systems etc. In turn, it is these more pristine systems that are vital to our physical and mental health. We would have never realized the magnitude of the complexity of natural systems if it was not for our attempt to set aside landscapes specifically and above all else to preserve their naturalness.

For BRMC's part, we work to continue to learn what comprises the flora and fauna on the Bull Run Mountains. Thanks to members and donors generous contributions we have been able to fund a four-year moth survey and two years of a three-year beetle survey. BRMC staff has continued to monitor life in the mountains' streams, and Marty Martin continues to study the mountains' rattlesnake population. We are looking forward to finishing the beetle survey in 2011 and to possibly begin a damselfly and dragonfly survey in 2012. We continue to utilize our nature camp program to document the species of salamanders, frogs, toads, turtles, lizards, and snakes found on the mountains. A few years ago an intern and our naturalist Ken Bass discovered a spring salamander species that had never been documented on the mountains. This baseline information is so important. Attempts to maintain BRMNAP's resources can be assessed more effectively if you can follow the flora and fauna composition through time.

The idea of "original naturalness, present naturalness, and future naturalness" may be beyond what humans will ever witness again, but the attempt to maintain landscapes with this primary purpose has never been more important. It is imperative to add to and support Natural Area Preserves along with basic research to understand them more deeply. As time marches on Natural Area Preserves become the lighthouses in the fog of understanding naturalness at all.

Reference: Marris, Emma. *The Heart of Wood*. Nature. 455, 277-280 (2008).

In the Good Ol' Summertime

This summer has been a fun and exciting time at BRMC! Almost 300 youth have participated in our programs, workshops, and camps. During these events, we have seen a wide variety of animals including:

American Toad, Green Frog, Pickerel Frog, Wood Frog, Spring Peeper, Upland Chorus Frog, Eastern Red Spotted Newt, Slimy Salamander, Redback Salamander, Red Salamander, Dusky Salamander, Two-Lined Salamander, Spotted Salamander, Five-lined Skink, Broadhead Skink, Eastern Fence Lizard, Queen Snake, Garter Snake, Ring-neck Snake, Rattlesnake, Copperhead, Black Rat Snake, Black Racer, Northern Watersnake, Box Turtle, plus many birds, butterflies, insects, and macro-invertebrates.



Janie and Anna Ritter sampling aquatic macro-invertebrates in 2001.



Chesapeake Watershed Workshop participants, Janie and Anna Ritter, identifying aquatic macro-invertebrates this summer.

We are so thankful for our summer interns! Many of our interns have been with us since they were campers (witness photo to the left of the Ritter girls in a similar pose as the picture to the right, but ten years earlier!). These eight students helped us out with everything from our youth camps, finding animals in the field, to trail maintenance and tending the garden. We sincerely want to thank **James Bonaffini, Nick Bonaffini, Tyler Crossen, Kristina Fauss, Andrew Fisher, Lucas Quinn, Audrey Ramsey, Caden Ring, Anna Ritter, Jillian Swinford, and Tyler Zimmerman** for all of their hard work!

To Play in the Water?

By Michele Thieme

Over the last several weeks, streams and rivers and the creatures that live in them have been on my mind, as I was teaching a stream ecology class to junior high and high school teachers. We talked a lot about the methods used to determine the health of streams. One of the common metrics examined is the EPT Index – the numbers of taxa within the aquatic insect groups Ephemeroptera (Mayflies), Plecoptera (Stoneflies), and Trichoptera (Caddisflies). This index provides information as to what has been occurring in a stream, as most of the species in these groups are sensitive to disturbance and will disappear if the integrity of the system has been altered.



Photo by M. Kieffer

While I was busy with the teachers, Michael and Kristin were visiting Turkey Run National Park with the Chesapeake Watershed Workshop participants. The night before there had been a big storm, so Turkey Run was raging with stormwater run-off. The river smelled like a sewer

and a park official warned against venturing in the waters. The crew wisely decided against sampling that day. Likely the EPT Index is low for that system. But, why do we care if those creatures are still there? They are “canaries in the coal mine” regarding the health of our streams; they also provide the food base for larger aquatic species that we eat.

From a strictly human-centric perspective, we can probably figure out how to filter the water better before we drink it to remove the thousands of new chemicals that are being put into it each year. We can probably find technological fixes, such as technologies to retard inputs of stormwater, for many of the ways in which we alter our aquatic systems. It seems smarter and cheaper to reduce the chemicals we put into our waters and to design our

communities to limit impacts to these systems. We could survive with water that children should not play in, but I hope for a future in which there are no days when kids can't play in the water.

Bull Run Mountains Conservancy Public Programs 2010

HIKE WITH A NATURALIST **1st Wednesday of Every Month** **9a.m.—11a.m.**

Our first Wednesday of the month hike for those members and nonmembers who prefer to hike in a group. Come and discover some of the flora and fauna of the Bull Run Mountains.

This program is free; all are welcome.

HALLOWEEN SAFARI

October 16th—Saturday, 7—8:30 p.m.

October 22nd—Friday, 7—8:30 p.m.

October 23rd—Saturday, 7—8:30 p.m.

BRMC wants to take you on a night-time hike through the Bull Run Mountains! Join us for face painting, Halloween snacks, hot cider, a bonfire, and live music. All participants should bring a flashlight and wear good walking shoes.

Pre-registration required for

7:00-8:00 p.m. time slots.

First-come, first-served from 8:00-8:30 p.m.
\$7 in advance/\$10 at the door

TODDLIN' ALONG THE BULL RUN MOUNTAINS

November 2nd—Tuesday

10:00—noon

This is a chance for toddlers and pre-school aged children to enjoy the beautiful fall colors of the mountain. We'll start with a few hands-on activities at the Mountain House and then we'll head out in the field to discover nature using all five senses.

Appropriate for ages 3-6.

Pre-registration required.

Members: \$10/non: \$15.

OLD HOME SITES

November 13th—Saturday

8:30—11a.m.

BRMC is thrilled to continue our exploration of old home sites with an extra treat. Go beyond the trails as we explore cemeteries, foundations, and clearings that mark past residences. Then sit back and enjoy a hot breakfast in the woods as local historian Marcia Markey performs a historical reenactment based on diaries, letters, and

other primary sources. Space is limited and spots fill early.

Pre-registration required.

Members: \$25/
non: \$30.



Photo of the Dawsons in the cemetery.

MOUNTAIN MOONLIGHT WALK

December 18th—Saturday

7 p.m.—10 p.m.

Join a BRMC naturalist as we hike up the moonlit mountains. You will learn about the moon and its phases while we enjoy wine and snacks at the top. On our descent we will walk along Catlett's Branch and enjoy the sights and sounds of the moonlit stream.

Pre-registration required.

Members: \$15/non: \$20.

WINTER NATURE CAMP

December 27-28—Monday and Tuesday

9a.m.—4 p.m.

Join BRMC for a winter adventure and learn more about the winter woods. Birds are more easily seen in leafless trees and sounds are magnified in the winter stillness. Dress for the weather—snow makes these camps all the more fun. Appropriate for children ages 7-12.

Pre-registration required.

Members: \$100/non: \$150.

BUILD YOUR OWN WORM BIN COMPOSTER

February 12th—Saturday

9:30a.m.—noon

Come learn everything you ever wanted to know about worms! Observe a working worm bin and discuss how these creatures create compost that can be used around your yard and garden. Construct your very own worm bin to take home with you! Start harvesting compost from your worm bin in several months, just in time for your summer garden. Building materials and worms will be supplied.

Pre-registration is required.

Members: \$75/ non: \$90

HALLOWEEN SAFARI: October 16, 22 & 23

Pre-Register for Halloween Safari by filling out and returning this form to BRMC. We will email you a confirmation to bring with you the night of Safari, after we receive your information.

HALLOWEEN SAFARI **Pre-Registration**

Name/Group: _____

Phone: _____

Circle One:

Saturday, Oct 16 Friday, Oct 22 Saturday, Oct 23

Preferred Start Time of Hike. Circle One:

7:00-7:15 7:15-7:30 7:30-7:45 7:45-8:00 8:00-8:15

Number of People: _____

Total Amount Enclosed? (\$7/person in advance) _____
Make check payable to BRMC.

- *Halloween Safari is a rain or shine event
 - *Pre-registrations are non-refundable/non-exchangeable
 - *Pre-registrations are on a first-come, first-served basis
- Mail to:
BRMC, P.O. Box 210, Broad Run, Virginia 20137



Clip art copyrighted by Robbie Peachey.
<http://webclipart.about.com>

Be apart of our biggest event of the year – Halloween Safari! BRMC wants to take you on a night-time hike through the Bull Run Mountains! A guide will lead you along the trail where you will meet “wildlife” that perform natural history skits. There is a new cast of animals each year, so don’t miss it! Join us for face painting, Halloween snacks, hot cider, a bonfire, and live music.

Bring a flashlight and wear good hiking shoes.

\$7 in advance/\$10 at the door
Pre-registration required for 7:00-8:00 p.m. time slots.

First-come, first-served from
8:00-8:30 p.m.

Volunteers needed, and donations and sponsors welcome.

Contact us at (703) 753-2631, or
info@brmconservancy.org.

Seasonal Photo Contest!

We are kicking off a seasonal photo contest that will run from the fall of 2010 through the summer of 2011. We welcome creative submissions depicting the landscapes and wildlife of the Bull Run Mountains through the seasons. Winners for each season will be featured on our website and in the newsletter.



Photo by M.

Submission Dates are the following:

- ◆ Fall Photos: December 15th
- ◆ Winter Photos: April 15th
- ◆ Spring Photos: June 15th
- ◆ Summer Photos: September 15th

Please submit photos to info@brmconservancy.org with “Seasonal Photo Contest” in the subject line.

If you have any questions, contact BRMC at 703-753-2631 or info@brmconservancy.org



Photo by M. Kieffer

At the end of the summer, and after an all too brief stay at the mountain house as the resident natural resources manager, Ben and I will be moving on to new things. We will be leaving for Burlington, Vermont, where Ben will start his PhD at the University of Vermont. While we're happy to beat the heat in the cool of the Green Mountains, it is sad for us to leave a house, a mountain, and an organization from which we have learned so much and to



which we have grown so close. Living in the mountain house was always an adventure. In the winter we braved the snow storms, once having to actually ski to the house to get our cat! In the spring we watched as our resident black rat snakes awoke from their winter slumber and emerged to meet the warming weather outside. In the summer I had the pleasure of working with our many campers, interns, and volunteers for herpetology, pre-school, and summer nature camps, where I'm sure I learned as much from them as they learned from me.

The Bull Run Mountains are special, not just for their aesthetic appeal, but also for the community that supports and enjoys them. With an ever-expanding greater D.C. area to contend with, BRMC and its founders have secured a leafy green foothold where the public comes to escape the bustle of their daily to-dos and children come to turn over logs and rocks in hopes of discovering nature's well kept secrets. Thank you to those who support our organization, and thank you to the many people that made Ben and me feel so welcome. You will truly be missed.

Happy hiking...

To register for a program, fill out the form below and mail with your payment to:
Bull Run Mountains Conservancy, P.O. Box 210, Broad Run, VA 20137
For more information, call us at (703) 753-2631 or visit our web site at
www.brmconservancy.org.



Name _____

Address _____

City/ZIP _____

Home phone _____

Work phone _____

E-mail _____

Are you a BRMC member? _____

No. of people registering _____

Fee _____

Amount enclosed _____

Name of child if registering for youth camp _____

Toddlin' Along the Bull Run Mountains
November 2, Members \$10/Non \$15

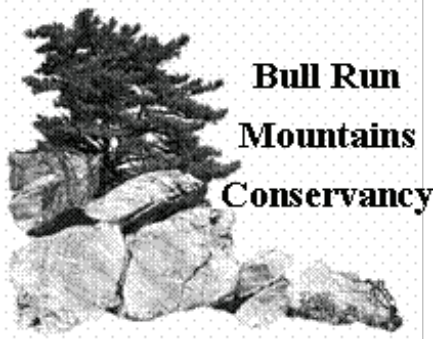
Old Home Sites
November 13, Members \$25/Non \$30

Mountain Moonlight Walk
December 18, Members \$15/Non \$20

Winter Nature Camp
December 27-28, Members \$100/Non \$125

Build your own Worm-Bin Composter
February 12, Members \$75/Non \$90





**Bull Run
Mountains
Conservancy**

Education · Research · Stewardship

P.O. Box 210 · Broad Run · Virginia 20137
(703) 753-2631 · www.brmconservancy.org

Yes, I would like to become a member of Bull Run Mountains Conservancy.

Name _____

Organization _____

Address _____

Phone _____ E-mail _____

Referred by _____

\$15 Student
 \$20 Senior
 \$25 Individual
 \$35 Family
 \$75 Group
 \$100 Sustainer
 \$300+ Leadership
 \$1,000+ Benefactor
 \$1,000+ Corporate
 \$5,000+ Conservation Patron
 Other _____

Please make your tax-deductible contribution to:
Bull Run Mountains Conservancy, Inc., P.O. Box 210, Broad Run, VA 20137

Bull Run Mountains Conservancy is a membership driven organization.

Become a member today and support our programs and support the public preserve. Your membership provides BRMC necessary funds to operate and shows our foundation and corporate supporters that the public values and appreciates the resource.

Membership Benefits:

- Support environmental and historical programs for all ages
- Support research and management of the natural area
- Discounts on all public programs and trips
- Quarterly newsletter including our program calendar

Join today at www.brmconservancy.org

Bull Run Mountains Conservancy	2010 Calendar of Events
October 16, 22, and 23	Halloween Safari
November 2	Toddlin' Along the Bull Run Mountains
November 13	Old Home Sites
December 18	Mountain Moonlight Walk
December 27-28	Winter Nature Camp
February 12	Build your own Worm-Bin Composter
Unless otherwise noted, all programs and events will meet at the BRMC Mountain House at 17405 Beverley Mill Drive in Broad Run, Virginia, across from the Bull Run Mountain State Natural Area Preserve trailhead.	<p>Directions: Take I-66 to Haymarket exit. Go south on Rt. 15 Go west on Rt. 55 for 2.7 miles. Turn right on Turner Rd., then left on Beverley Mill Dr. to the Mountain House 3/4 mi. on left. Call (703) 753-2631 for more information or visit our Web site at www.brmconservancy.org</p>