

OCTOBER 2019

GROWTH RINGS

Appalachian Forest National Heritage Area News



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Appalachian Forest National Heritage Area is dedicated to the promotion of Forest Heritage within out 18 counties. To learn more, be sure to visit our website. Be sure to like us on Facebook in order to stay up to date between newsletters!

Organizational Updates

AFNHA has been very busy transitioning the 2019-2020 cohort of AmeriCorps to be acquainted with their new sites. We are partnered with some new sites this year, including Cass Scenic Railroad State Park, the USFWS office in White Sulphur Springs and Camp Pioneer. We are hoping for a successful, exciting year for our new members!

We most likely will not be receiving funding from the National Park Service until spring 2020; because of that, our consultants are on retainer until further notice. However, we are still trying to remain active and keep interested parties in the loop of what we can do in the meantime. As of right now, we are working on:

- Continuing outreach, communications and reaching out to our network of partners
- Our list of assets
- A revised website and other outreach materials
- Networking with other National Heritage Areas
- Administrative steps to be ready for NHA funding, when available

Take our input survey and be part of our management planning process!



Podcast for AFNHA Announced

AmeriCorps member Willie Weems is in the process of creating a series of podcast episodes called "Voices of the Forest". The first episode will feature regional specific spooky stories, and will be released later this week.

Listen to the trailer here!



Timber Harvest and the Endangered Running Buffalo Clover

By Melissa Thomas-Van Gundy

DISCLAIMER: The findings and conclusions in this article are those of the author and should not be construed to represent any official USDA or U.S. Government determination or policy.

Running buffalo clover (Fig. 1, RBC, *Trifolium stoloniferum*) is a federally endangered plant with some fairly complicated habitat needs. On the Fernow Experimental Forest in Tucker County WV, part of the Monongahela National Forest administered by the Northern Research Station of the U.S. Department of Agriculture's Forest Service, running buffalo clover is found in forested settings. More specifically, the plants are largely restricted to corridors, skid tails for the removal of forest products, where bare dirt is exposed every 7 to 14 years or so (Fig. 2).



Fig. 1: Individual RBC plant on older skid road

The habitat required for the species to flourish is often described as hardwood forests with filtered light conditions on soils that are high in nutrients like calcium. These light conditions can be found when some of the trees in the forest are removed in a partial harvest as compared to heavier, higher intensity disturbance such as a clearcut. However, what happens to the plants on the skid roads when timber is harvested is often a high intensity disturbance as bare mineral soil is exposed and plants are crushed or uprooted (Figs. 3 and 4.). Also, the plants rarely move much beyond the edges of the skid trails on the Fernow even when filtered light conditions are found off the skid road.



Fig. 2: Patch of RBC on an older skid road – each flag represents an individual plant

These two habitat conditions lead to a complex management strategy for successfully conserving the plant. On the Fernow [Experimental Forest] we have documented the increase in the numbers of individual RBC plants through time in our harvest units. The number of plants then declines as the skid road fills in with native plants and canopy gaps created by tree harvesting close. Numbers of RBC plants drop off sharply with use of the skid road, as expected, but then the road is rapidly recolonized by new seedlings and by older plants that were pushed up on the berm of the skid road. We also know that moving the skidder to a new harvest unit has introduced RBC to new areas on the Fernow Experimental Forest.



Fig. 3: RBC plant, in yellow circle, on skid road that has had only light use to remove a few logs



Fig. 4: Active skid road use in an area managed through single tree selection under uneven aged management. Rebar and tag at the base of the maple tree are references for the location of RBC plants on the skid road before logging.

This year, 2019, a stand with RBC and managed for timber products was harvested for the 8th time (Figs. 5 and 6). On this 25 acres, trees are removed every 10 years under guidelines for how many trees are retained in each size class and how much basal area is left in the stand (Schuler and others 2017). Single tree selection differs from diameter limit harvest where trees are removed if they are larger than a threshold diameter with little consideration given to the structure of the residual stand. Under single tree selection, a type of true uneven-aged management, a target distribution of number of trees per size class is compared to the current numbers of trees in those classes.

Only those trees that are extra or in excess of the target numbers are removed and this removal happens across a range of diameters. This combination of ground disturbance and partial harvest on rich, limestone-derived soils, has been shown to successfully perpetuate RBC.



Fig. 5: Tree felling in the area under single tree selection management.

When RBC was first found on the Fernow, surveys determined where else the plant occurred. A few plants were found on a deer path in an area set aside as a reference area and no timber harvests, road construction, or other active research takes place here. Old forest type maps of the Fernow show fields in this area in 1932. No RBC plants have been found in this area since 2 individuals were noted in 2005. While the forest canopy in the unmanaged reference area may not appear different from the forest managed through single tree selection, the important element missing for RBC is a disturbance that creates bare ground (Fig. 7).



Fig. 6: Timber products removed from the forest while creating habitat for RBC

The biology of RBC is an interesting story of how an endangered species can benefit from commercial timber management when the intensity and timing of multiple disturbances are considered.

For more information on RBC, please visit:

<https://www.fws.gov/midwest/endangered/plants/runningb.html>.

For more information on the Fernow Experimental Forest please visit:

<https://www.nrs.fs.fed.us/ef/locations/wv/fernow/>.



Fig. 7: The unmanaged reference area near where RBC have been found in the past.

Volunteer Opportunities & Upcoming Events!

10/18/2019
10:30 AM -
3:30 PM

Save Our Streams Workshop @ Seneca Creek, Seneca Rocks WV
WVDEP SOS Training Workshop hosted by Trout Unlimited at Seneca Creek. Participants will meet at the Seneca Rocks Discovery Center at 10:30, lunch provided. Contact morgan.agee@tu.org for more information!

10/19/2019
9AM -
1PM

E-Cycle Event @ Phil Gainer Community Center, Elkins WV
Rain or shine! Rid yourself of old electronics ethically! Click the title above for a list of acceptable items.

10/19/2019
9:30 AM -
5 PM

Scots-Irish Halloween @ Appalachian Forest Discovery Center, Elkins WV
Visit the Appalachian Forest Discovery Center (Elkins, WV) and carve turnips in a traditional Scots-Irish style Halloween celebration! Turnip painting will also be offered for younger children, as well a reading of the Jack 'o' Lantern legend and a coloring table. Admission is free!

10/26/2019
10 AM -
4 PM

Athurdale Heritage Center Fall Festival & Craft Show, Athurdale WV
Live music, craft vendors, craft demonstrations, fall foods, hayrides and kids activities. For more information, visit arthurdaleheritage.org. Admission free!

11/8/2019
3 PM

Civil War Coffee Tastes Terrible @ Beverly Heritage Center, Beverly WV
Sample coffee from the Civil War era at Beverly Heritage Center! \$1 entry!

11/2019

Greenbrier Historical Society's Escape Room, Lewisburg WV
See if you can survive life on the frontier! The exact date is yet to be announced, Be sure to check greenbrierhistorical.org for the events date announcement and further details!



Ski Patrol Training in Canaan Valley

By Willie Weems

Outdoor recreation is a huge part of our tourism economy. AFNHA AmeriCorps member Willie Weems spends a day at Canaan Valley to attend a ski patrol training. Staff being properly trained for emergencies is key to running safe operations, especially during the upcoming busy season.

It was a sunny September afternoon, high of 85, but the Canaan Valley Ski Patrol was getting ready to hit the slopes. It was a training day, full of training and refreshers. Most of the day was full of first aid and CPR training, and everyone's favorite, logistics. But these trainings and refreshers are vital, ensuring the patrollers have the skills and experience necessary to save lives.

People were darting around picking up bags of equipment. Some people wore their red ski patrol vests with huge white crosses. One guy even had a CPR mask wrapped around his head like a headlamp. Eventually, the 60 or so

or so patrollers found their way out to the grassy slopes. Some started walking up the mountain, and everyone else got on the ski lift (chairlift rescue is hard to teach in a classroom setting, plus it gave people something to look forward to at the end of the day). It was surprisingly hard to get on the ski lift without skis or snow. A few minutes later, the chair lift stopped, leaving patrollers stuck 60 feet in the air.

A stuck chairlift is one of the worst emergencies a ski resort can face, potentially leaving hundreds of skiers trapped in frigid temperatures. The first step of rescuing people from a chairlift is keeping people calm.

Someone on the ground talked to the people stranded in the lift, while another person readied an eight foot tall slingshot. The slingshot shot a bean bag attached to a small rope over the cable the chairs are attached to. On the other end of the small rope was a larger rope and a metal fitting that went over the cable to protect the rope. And attached to that rope was a small chair. It wasn't really a chair, and actually small piece of plastic attached to a metal pole. To use it, just position the plastic part under you while you're still on the chair lift, wrap a rope around your chest, and scoot off the chair lift. There's a brief drop, and then you're gently lowered to the ground, safe and sound.

