#### CENTRAL APPALACHIAN SPRUCE RESTORATION INITIATIVE

#### SPECIAL POINTS OF INTEREST:

- Barton Bench shows USFS commitment
- Red spruce website launches
- WV State Parks plant spruce
- Volunteer mapping project underway

# Corridors VOLUME 1, ISSUE 1 MAY 2011

## **CASRI Releases Restoration Guidelines**

The Central Appalachian Spruce Restoration Initiative released a guide to red spruce restoration this spring. The document was co-authored by CASRI members from the U.S. Forest Service, U.S. Fish & Wildlife Service, West Virginia DNR, and The Nature Conservancy. The document is designed to be a resource for any partners seeking to conduct red spruce restoration from a variety of initial conditions.

"Restoration Approach" defines restoration as *estab*lishing desired ecological conditions that initiate or accelerate recovery of red spruce-northern hardwood ecosystem communities along historic trajectories with functioning natural processes and minimal management *intervention.* From this principle, the authors went on to compile literature that supports seven different core restoration objectives. The objectives provide insight into the scientific thinking behind the on-the-ground work CASRI partners are engaged in.



Recognizing that each restoration site presents its own unique challenges, the Restoration Approach Committee recommends different actions to achieve restoration objectives based on initial site conditions. An old strip mine will require different restoration tactics than a degraded riparian area or non-native plantation forest. Many of the common initial site conditions and restoration scenarios found in the Central Appalachians are addressed in the second part of the document.

"Restoration Approach" showcases the science behind CASRI's Action Plan. It is meant to be a working document that will continue to evolve with the best available science and experience gained through implementation. If you would like a copy of the latest version of CASRI's Restoration Approach, please contact Evan Burks, ejburks@fs.fed.us.

### Monongahela National Forest Tackles Barton Bench

The Barton Bench area refers to a 90 acre parcel of land mined for coal in the 1970s prior to becoming part of the National Forest system. The reclamation techniques employed by the coal operators left the area in a less than desirable condition. To ensure stability, soils were heavily compacted, and all disturbances were sowed with aggressive, nonnative

grass species. After several decades, the area was still covered by only a dense grass mat which has inhibited native species from becoming established. This seemingly permanent condition is referred to as 'arrested succession' and can be reversed with human intervention. The ultimate goal of Barton Bench ecological restoration project is total naturalization. In the short term, the project will provide early successional habitat for wildlife species. In the long-term, restoration will lead to healthy watershed conditions and a native red spruce-northern hardwood ecosystem within the project area.

The project kicked off when The Wes-Mon-Ty Resource

#### Barton Bench cont.

**Conservation & Development** Project, Inc. and the Monongahela National Forest received a \$5,000 Stage I grant and \$12,000 Stage II grant through the 2010 FOCUS WV Brownfields program to address barriers to revitalization of Barton Bench Ecological Project Area. Patrick Kirby, FOCUS WV Director says, "The Barton **Bench Ecological Restoration** Project provides a stepping stone for restoration efforts at the mine scarred and ecologically barren Barton Bench, initiating restoration progress and spurring community in-

#### volvement."

The Monongahela National Forest then partnered with Appalachian Regional Reforestation Initiative (ARRI) and the Office of Surface Mining Reclamation and Enforcement (OSMRE) to plan the site preparation. A technique known as 'deep tillage' was used in the fall of 2010 to decompact soils and prepare the site for planting.

To celebrate Arbor Day, volunteers gathered on site to plant 4,000 native tree species including red spruce. Over 16,000 total trees were planted with funding from The Arbor Day Foundation and help from AmeriCorps. Other partners attending included representatives from the WV Division of Natural Resources, The Nature Conservancy, WVDEP, ARRI, US Fish and Wildlife Service, West Virginia Water Research Institute, WV Highlands Conservancy, WV Division of Forestry, and WesMonTy RC&D. Volunteers enjoyed lunch provided by Appalachian Forest Heritage Area.



Partners gather at Barton Bench.

## RestoreRedSpruce.org Launches

The West Virginia Highlands Conservancy launched <u>www.restoreredspruce.org</u> to support the red spruce restoration efforts in Central Appalachia.

The new site contains information about red spruce ecosystems and updates on ongoing restoration projects. RestoreRedSpruce.org will help more volunteers get involved in the effort.

Visitors to the site are able to link to other agencies and nonprofits involved in the effort. A link to make a tax deductible donation to the WVHC spruce restoration effort is also provided. Please check the site often. Look for more links, documentation, educational and volunteer opportunities, history, ecology and anything and everything about the red spruce forests of the Central Appalachian mountains and our efforts to restore them. "RestoreRed Spruce.org will help more volunteers get involved in the effort."

### West Virginia State Parks Get Involved

West Virginia State Parks have stepped up their involvement in the red spruce restoration initiative. Working with Canaan and Blackwater Falls State Parks, CASRI was able to help organize two separate planting projects.

In the spring of 2010 the Monongahela National Forest, with help from the National Forest Foundation, planted 5,000 red spruce seedlings on an old strip mine adjacent to Blackwater Falls State Park. The State Park was able to plant additional trees to increase the size of the understory planting patch.

Then, in the fall of 2010 Canaan Valley State Park continued the effort by planting an additional 2,000 red spruce seedlings to buffer the rare Abe's Run wetland. Volunteers from West Virginia University amassed with dibble bars on a beautiful September Saturday. The State Park hopes these trees will one day provide a buffer to the wetland and a cool spruce forest that visitors can enjoy.



WVU students plant spruce around Abe's Run Wetland.



For more information please contact:

Evan Burks

Partnership Specialist

Phone: 304-636-1800

Fax: 304-636-1875

E-mail: ejburks@fs.fed.us

CASRI envisions a red spruce-northern hardwood ecosystem restored across portions of its former range on both public and private lands, with the scale, connectivity, maturity, and other features which will allow it to be fully functioning and sustainable over time.

### **Spruce Mapping Underway**

We're looking for volunteers who have access to GPS units and are willing to hike the backcountry and/or drive the back roads to help map the current extent of red spruce.

In order to restore red spruce communities, we need to know where our remnant red spruce stands currently exist on the landscape, and thus where the greatest opportunities for restoration and habitat connections are.

The West Virginia DNR and partners have worked together to create a map of conifer cover, based on air photo interpretation, within the range of red spruce in West Virginia. The map has over 13,000 polygons showing high, medium, low, and absent conifer cover. However, much of the conifer cover is hemlock, and some is pine. We need to turn this conifer map into a red spruce map, and we need your help. Here's how you can participate.

What you need:

- Garmin (or Trimble) GPS unit that can download points
- Access to a computer with Excel and DNR Garmin (free download) software
- Ability to distinguish red spruce from hemlock, fir, pine, and Norway spruce
- Mapping protocol instructions

Visit www.restoreredspruce.org for more information.

