

**Lower Cowpasture Restoration Project**  
**Field Tour**  
**Friday, June 21, 2013**

***Stop 1: Warm Springs Mountain Restoration Project (Middle Mountain Unit) and Unit 5 of the Mares Run Timber Sale.***

Warm Springs Mountain Restoration Project is part of the Appalachian Fire Learning Network and involves prescribed burning approximately 18,000 acres in eleven units in partnership with TNC (The Nature Conservancy). The Middle Mountain unit is approximately 920 acres and encompasses both TNC and NFS (National Forest System) lands.

Unit 5 of the Mares Run Timber Sale is a modified shelterwood harvest unit, approximately 29 acres. Mares Run Timber Sale has been marked and sold. Unit 5 has not been harvested and is approximately 97 years old. A portion of the unit is within the Middle Mountain burn unit. The Middle Mountain burn unit was prescribed burned in April 2010.



Figure 1. Unit 5 – Mares Run Timber Sale. Area on the left was part of the Middle Mountain prescribed burn. Area on the right was outside the Middle Mountain burn unit.

**Stop 2: Unit 2 Mares Run Timber Sale.**

Unit 2 of the Mares Run Timber Sale is a recently harvested modified shelterwood cut. The unit is approximately 16 acres. At the time of harvest, the unit was approximately 92 years old. Approximately 10-15 square feet of basal area was retained in the unit. The residual overstory composition also includes six 9 inch or larger trees to incorporate the guidelines of the Indiana Bat Biological Opinion dated September 16, 1997.



Figure 2. A recently harvested modified shelterwood cut (Unit 2 – Mares Run Timber Sale).

**Stop 3: A potential modified shelterwood cut and a potential TSI (timber stand improvement) unit.**

The potential modified shelterwood harvest unit (Figure 3) is approximately 14 acres and is approximately 108 years old. Post-harvest, approximately 10-15 basal area (BA) of mostly oaks and other hard mast species would be maintained. The residual overstory composition would also include six 9 inch or larger trees to incorporate the guidelines of the Indiana Bat Biological Opinion. The majority of the post-treatment stands would be newly established and developing regeneration, with the older component being remnants from the original stand's overstory and midstory. This unit would be harvested using ground-based logging methods and would be site prepared for natural regeneration

by chainsaw felling of residual nonmerchantable woody vegetation. Animal den trees and mast producing hardwoods would be left where available.

The potential TSI unit (Figure 4) is approximately 9 acres. This stand was regenerated approximately 21 years ago using a modified shelterwood harvest. Approximately 30 to 40 desired trees per acre would be identified. Competing trees within 10 feet of the desired tree will be cut with hand tools or chainsaws. No chemicals will be used. Trees to be cut are typically between 1 and 6 inches in diameter.



Figure 3. A potential modified shelterwood harvest area.



Figure 4. Potential TSI area.

#### ***Stop 4: Wilson Creek and Wilson Creek Dam***

The Wilson Creek dam creates a barrier to aquatic species moving upstream and Wilson Creek Dam has historical value.

Wilson Creek Dam is a concrete and stacked stone dam constructed circa 1936 by the Civilian Conservation Corp (CCC) as a water supply dam for Douthat State Park. The dam was part of the original CCC construction of Douthat State Park. The park is listed on the National Register of Historic Places for the role its design played in the development of parks nationwide. The Wilson Creek dam is a contributing element of the Douthat State Park Historic Site. A section of the spillway has been destroyed by deterioration, erosion and water activity.

Wilson Creek is a cold water stream. Species typically occurring in these waters include brook trout, blacknose dace, and sculpin. Wilson Creek is a Class II trout stream. VDGIF classifies trout streams based on aesthetics, productivity, resident fish population and stream structure. Class II wild trout streams contains a good wild trout population or the potential for one but is lacking in aesthetic quality, productivity, and/or in some structural characteristic. Class II streams maintain good water quality and

temperature, maintain at least a fair summer flow, and adjacent land is not extensively developed. Class II wild trout streams are considered good wild trout streams. Approximately 15 miles of Class II wild trout streams are located above the dam. (Wilson Creek and Wilson Creek Left Prong). Approximately 5 miles of Class II wild trout streams are located below the dam. (Wilson Creek).



Figure 5. Wilson Creek Dam