

**Shawnee National Forest  
Hidden Springs Ranger District  
Trails Designation Project Accomplishments  
Months of October and November 2007**

**Trail work accomplished in the Lusk Creek Wilderness under the Trails Designation Project, using primitive tools and traditional methods in accordance with the Forest Service National Wilderness Policy:**

- The trail crew completed the final stages of a 1.25 mile re-route between the Natural Bridge landmark and Secret Canyon (Figures 1 and 2). The re-route begins at the west end of Natural Bridge and continues east looping under the southern boundary of private property (in holding) referred to as the Coyote Club, then cuts to the north on a switchback connecting with Trail # 492D, south of Secret Canyon (Eddyville Quad #20 T11S, R6E, Section 27, Pope County). The final stages of work involved the installation of a major drainage feature built with cedar logs and sandstone large enough for equestrian use. The feature includes seven step platforms built into the hillside that ascend the terrain allowing for a gradual elevation gain while still maintaining proper slope (Figures 3 and 4). Approximately four tons of soil was excavated by shovel during the construction of the steps. In addition, a sandstone retaining wall measuring approximately 30 by 5 feet was installed on the upslope side of the drainage. Also, the crew installed approximately 50 grade dips and drainages throughout the re-route.

Once the re-route was complete, the trail crew went back and brushed in approximately two miles of old, interim trail that was steep and gullied. Gully plugs made of fallen tree limbs and brush were placed in the old trail tread to arrest erosion. The new re-route will be open for use in the spring of 2008 and will require the placement of gravel in the trail tread to allow for wet weather equestrian ride ability. This re-route is part of a larger trail system in the northern half of Lusk Creek Wilderness intended to provide users a safe, easily maintained, and well marked trail loop connecting with popular natural landmarks and stock confinement areas. The trail loop will offer a quality recreational experience while protecting the unique resources of the wilderness.

- An additional 0.6 mile section of new re-route connecting the northern ends of Cactus Trail # 481 and Wishing Well Trail # 481B was completed (Eddyville Quad #20 T11S, R6E, Sections 21 and 22, Pope County). The re-route was originally plowed and graded by mule in the spring of 2007. The trail crew used hand tools to complete the bench cut and final detail work of the trail tread. In addition, the crew installed a step platform and retaining wall made of sandstone at a natural drainage. Approximately 51 grade dips and drainages were also installed throughout the re-route and two large diameter trees lying in its path were cleared with cross cut saws.

**Trail work accomplished in non-wilderness areas within the Trail Designation Project areas using mechanized equipment:**

- The trail crew's mini-excavator and trail dozer were used to reconstruct a 0.5 mile section of Trail # 497 between Forest Service Road 1577 and the boundary of private property owned by Bill Blackorby located near the Wilson Tract (Eddyville Quad #20 T11S, R5E Section 36, Pope County). Once the trail tread was constructed, Bill Blackorby and volunteers from the local equestrian community donated over one hundred hours of their time, and equipment use, to spread approximately 230 tons of gravel in the trail tread (Figures 6 and 7). The gravel serves as a hardening material allowing for wet weather equestrian ride ability. In addition, the volunteers brushed in 0.4 mile of the original eroded trail tread.
- Also, in accordance with the Trails Designation Project's Trail Sign Plan, approximately 120 new directional trail signs were installed at designated trail junctions and entrances, within the Lusk Creek, Eagle Creek, Big Grand Pierre Creek, and Upper Bay Creek Watersheds (Figure 7).
- In addition, the trail crew was instrumental in completing a restoration project at the Garden of the Gods Observation Trail, located at the Garden of the Gods Developed Recreation Area (Herod Quad #19 T10S, R7E Section 36, Saline County). The Observation Trail follows along a small bluff in a designated Natural Area for quarter of a mile, and offers panoramic views of the Shawnee Hills and the Garden of the Gods Wilderness Area. Thousands of visitors each year hike the trail to view the fall colors and explore the unique geological features with names such as Camel Rock and Devil's Smokestack. Interpretive signs along the flag stone trail explain how the 320 million year old sandstone formations were formed by a giant inland sea. Overtime, short cutting along sections of the trail have impacted areas of the bluff's fragile topsoil. Thousands of footprints have resulted in erosion and areas of bare, hard packed soil. Gullies formed as a result of rain water runoff. In an effort to restore these areas, the District's Recreation Technicians installed additional sections of split rail fencing where visitors often left the trail. Signs were installed to inform the public of restoration efforts, and to remain on the designated trail. The trail crew completed the process of restoration. Twenty-five gully plugs made of native sandstone and cedar logs were installed (Figures 8 and 9). Native material such as fallen tree limbs, rocks, stumps and brush were positioned in the restoration area. The gully plugs will help to arrest the erosion, while the brush will aid in deterring visitors from walking off trail and help to restore a natural appearance (Figures 10 – 13). Overtime, through the process of freezing and thawing and the biodegradable aspects of leaf litter, the soil in the restoration areas could retain seeds and produce native vegetation. Restoration efforts were applied to two areas along the trail totaling approximately 2,000 square feet. These areas will be monitored and additional native material will be added as needed.



**Figure 1. Completed section of Coyote Club re-route, spring 2007.**



**Figure 2. Completed section of Coyote Club re-route, fall 2007.**



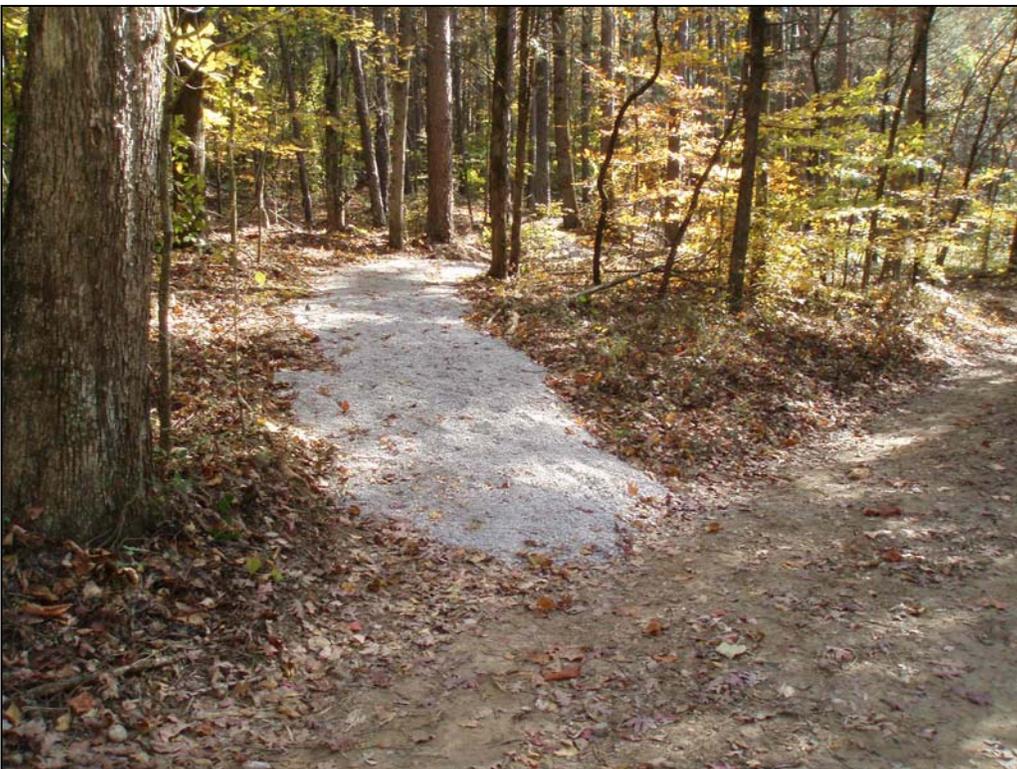
**Figure 3. During Construction. Sandstone and cedar logs were used to form the step platforms.**



**Figure 4. After. Completed step platforms forming a stairway.**



**Figure 5. Under Construction.** Section of Trail # 497 re-route after using trail dozer to form tread.



**Figure 6. After.** Completed section of Trail # 497 with gravel added.



**Figure 7. One of 120 new trail directional signs installed this fall.**



**Figure 8. Before. Erosion and hard packed soil along Observation Trail caused by short cutting to overlook areas (upper portion of trail).**



**Figure 9. After. Same area as above with cedar logs installed as gully plugs.**



**Figure 10. Cedar logs being used as plugs in a deep gully caused by rain water runoff flowing down the bluff (lower portion of trail).**



**Figure 11. A gully, caused by short cutting off the Observation Trail to the sandstone rocks in the foreground, was plugged with cedar logs and sandstone.**



**Figure 12. Before. Eroded, hard packed soil caused by short cutting the Observation Trail (lower portion of trail).**



**Figure 13. After. Same area as above following restoration efforts. A split rail fence was added along the trail later.**

**Planned project activities for December 2007:**

The trail crew will continue to work on trails in both the wilderness and non-wilderness areas within the project area. In the Lusk Creek Wilderness, work will be conducted on sections of the Wishing Well Trail # 481B (Eddyville Quad #20 T11S, R6E Section 28, Pope County) and sections of Trail # 457 along the slope above Lusk Creek just south of the Blanchard Church Creek Crossing (Eddyville Quad #20 T11S, R6E Section 22, Pope County).