

**Shawnee National Forest
Hidden Springs Ranger District
Trails Designation Project Accomplishments
Month of June 2007**

Trail work accomplished in the Lusk Creek Wilderness under the Trails Designation Project:

- On Saturday, June 2, the team of ten mules and three Forest Service staff from the Bridger/Teton National Forest (NF), out of Wyoming, completed their detail to the Shawnee NF. While they were at the Shawnee during the month of May, the Bridger/Teton team and a mule team from the Hoosier NF worked with the District's trail crew to haul over 300 tons of gravel into the Lusk Creek Wilderness. The smooth river gravel, with its clay base, is used to support the trail tread with the intention of providing a suitable wet-weather surface. Trail sections where the gravel was used include the recently re-routed Goat Trail (001) and Secret Canyon (429A).
- Throughout the first week of June, the Hoosier mule team continued to work with the District's trail crew to plow new re-routes in the Lusk Creek Wilderness (Figure1). Prior to plowing, the trail crew used hand tools to clear the center line path of the re-routes. Potential obstructions, such as brush and rocks, were cleared allowing the mules to pull the plow. This was the second time this year the Hoosier team and the trail crew worked with mules to plow and grade new re-routes. Each mule required two persons to direct, one to drive the mule, and the other to guide the implement. The plowing resulted in a rough cut for the trail tread, while the grading smoothed out the tread.

Nearly one and a half miles of trail re-routes were cleared, plowed, and graded. This work was conducted on trail sections 481, south of the location known as Frank's Tract, and section 481B, known locally as the Wishing Well Trail. This work could have taken the trail crew weeks with just hand tools. Once plowed and graded, the trail crew continued to work on the re-routes providing the final touch with sloping. The new re-routes will follow the natural contour of the terrain and help to eliminate old trail that was rutted and in flat, muddy areas. In addition, the re-routes will offer a loop trail that will eventually connect other trail sections throughout the wilderness.

- The trail crew also finished the final construction of a re-route connecting trail section 481 beginning north of the confluences of Lusk Creek and Barger Branch Creek to County Road 23. This re-route was originally plowed and graded in March, with detailed hand work continuing through April and May. This re-route is approximately 7/10 of a mile and currently open for use. Along this trail are a series of over 15 erosion control features such as drainages; in addition, two climbing turns with retention walls on both slopes were lined with gravel (Figures 2 and 3). Two major drainages distribute rain water runoff at key points where

sandstone was used to construct steps, retention features, and a combination of water bars and check dams. At the junction of trail sections 481 and 483 at Barger Branch Creek, a retaining wall 18 feet long, in a one to two tier formation, separates the two trails and adds sustainability to the connection point. A sandstone causeway was installed just adjacent to this wall, and serves as an erosion control feature. An additional 22 foot causeway was completed and anchored with 13 stones comprising the outer wall and cap stones. The causeway was offset with an equal length riprap inboard drain serving to allow runoff from upslope to drain out beyond the feature (Figures 4 and 5).

- Just to the south of the re-route above in the Barger Branch Creek area, is a section of re-routed trail, section 483, built last year. This section connects the Cactus Trail (483), north of Saltpeter Cave, with trail section 481 along the western slope of Barger Branch Creek. Due to terrain, the re-route was constructed at a steep slope. As a result, the re-route had sustainability issues resulting from rain water runoff. To correct it, the trail crew dug a new bench cut and installed over 30 water bars and check dams on the re-route. In addition, over 25 tons of gravel was used to harden the trail tread (Figure 6). The crew also reconstructed two sandstone steps at the base of the trail at Barger Branch Creek.
- The trail crew also worked on the section of trail between the Natural Bridge Creek Crossing on Lusk Creek and the geological feature known as Natural Bridge. Because of steep terrain, the crew installed six erosion control drainages hardened with gravel at the approach to the Natural Bridge. A large 1,200-1,500 pound sandstone step, back filled with gravel, was installed to eliminate what was a three by seven foot eroded trench. A 20 foot turnpike was also installed to protect the root structure of a large beech tree and to hold the corner of a turn. In this area, the soil is comprised of sand and loose sediment. To harden the trail tread, gravel was hauled in by mule and spread on the trail for 100 yards. An additional 25 foot turnpike was installed and filled with gravel leading to a climbing turn with gravel laid throughout. The final feature installed was a climbing turn platform. The turn was built with cedar logs in a series of four platforms, and filled with gravel.

Trail work accomplished outside of wilderness areas in the Lusk Creek Watershed under the Trails Designation Project:

- Using a trail dozer (sweco), the trail crew supervisor began construction of the re-route for trail section 481 from Frank's Tract to the Lusk Creek Wilderness boundary (Features 7 and 8). The original trail was deeply rutted due to its steep slope. The new re-route will follow the natural contour of the land. Once the trail dozer is used to clear and groom the new re-route, gravel will be hauled in by a mechanized gravel hauler and spread to harden the tread.

Planned project activities for July 2007:

- Heavy equipment will continue to be used by the trail crew to reconstruct sections of trail outside the wilderness near the areas of Jackson Falls and Wilson Tract. The trail crew will also continue hand work in the Lusk Creek Wilderness Area. The crew will work on the new re-route to the south of the private property known locally as the Coyote Club. This re-route will eventually connect trail section 481 with 492D and 492A south of the Secret Canyon area.

Also, the second phase of the Trail Sign Plan for the Trails Designation Project will be implemented in July. Over one hundred new directional trail signs will be installed along designated trails, outside of the wilderness, within the Lusk Creek, Eagle Creek, Big Grand Pierre Creek, and Upper Bay Creek watersheds. The directional signs will be mounted on posts located at trail entrances and junctions.



Figure 1. Section of new re-route for trail section 481B, Wishing Well Trail, recently plowed in by Hoosier mule team.



Figure 2. Re-route of trail section 481A. Climbing turn under construction.



Figure 3. Re-route of trail section 481A. Climbing turn completed with gravel.

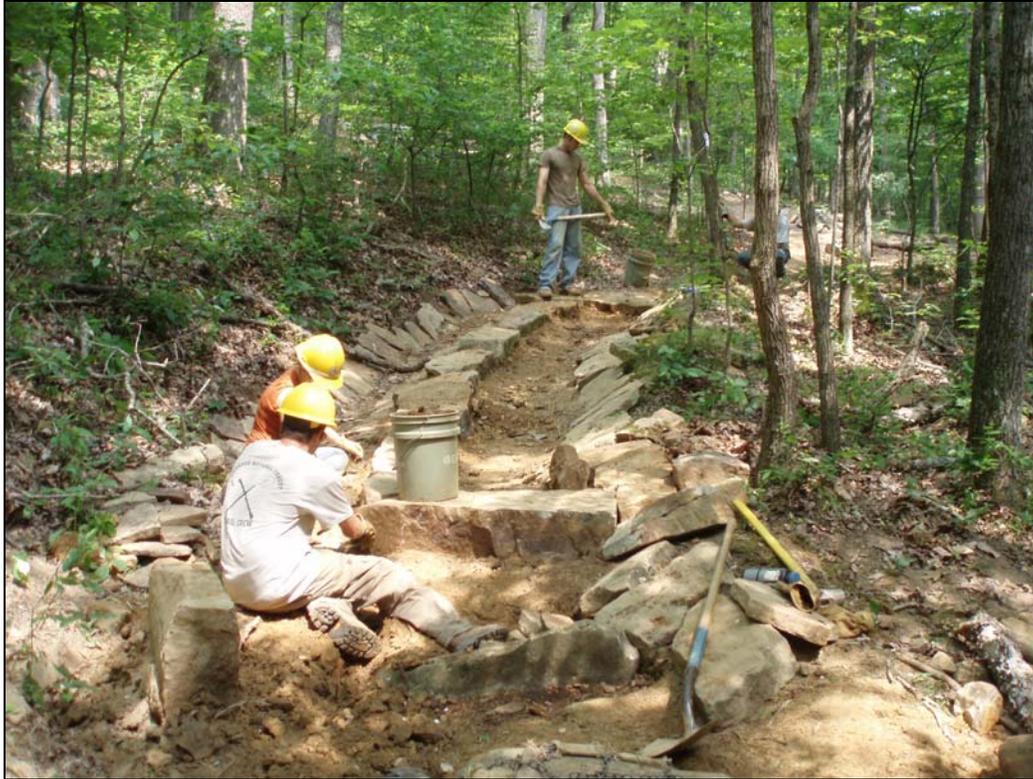


Figure 4. Re-route for trail 481A at Barger Branch Creek. Erosion control feature under construction at large natural seepage.



Figure 5. Re-route for trail 481A at Barger Branch Creek. Construction completed of erosion control feature and filled with gravel.



Figure 6. Re-route for trail section 483 on western slope above Barger Branch Creek. Erosion control features installed and back filled with gravel.



Figure 7. Trail dozer being used to construct re-route for trail 481 south of Frank's Tract.



Figure 8. Re-route for trail 481 south of Frank's Tract.