

NASLR's 2020 Mined Land Reclamation Award— Non-Coal Hamm Quarries, Herrington Mine

**Nominated by Scott Carlson,
Kansas Department of
Agriculture**

The Hamm Companies 80 acre Herrington Quarry located in Marion County has produced 1.5 million tons of the Cresswell Limestone since commencing operations in 1955. The original mining operation commenced in



1955 and consisted of approximately 33 acres, which were never reclaimed as the operation had ceased prior to the passage of the Kansas Surface Mining and Reclamation Act of 1994.

The 80-acre site was sold “as is” to Delbert Presslor who was unconcerned that one half of the site was an old open pit mine. Rather, he saw the potential in the one half of the property as being suitable for his hunting and fishing endeavors. In the mid 1980’s, Hamm Companies approached the landowner to re-open the mine. Not only did the landowner see this as an economical decision, the owner saw this as an opportunity to create the habitat of his dreams! The owner was an accomplished sportsman and wanted to create a wildlife sanctuary for the native species in the area such as bobcat, deer, various gamebirds and waterfowl. The mine’s various elevations and subaqueous excavations provided the landowner and Hamm Companies numerous opportunities to create specific habitats, even though they could have very easily restored the land back to agricultural use. The landowner worked with Hamm Companies; Kansas Department of Agriculture, Division of Conservation; the Kansas Department of Wildlife, Parks and Tourism; and the Wildlife Council to create a management plan that would promote and increase the wildlife diversity and plant life.

Highlights of the reclamation include:

Food Plots – Nearly 10 acres were reserved specifically for edible vegetation for wildlife. A diverse selection of plants was chosen to attract many species of wildlife. Turnips, Rapeseed, Chickory, Milo, Alfalfa, Yellow Sweetclover, White Sweetclover, Purple Prairie Clover, Alsike Clover, and Crimson Clover were planted. Prior to planting each of the three food plots, the areas were sprayed twice to minimize weeds. Upon planting, the grounds were fertilized to promote healthy growth.



Pollinator Planting – To ensure that something is blooming during all times of the growing season, a pollinator mix consisting of nearly 50 wildflower species was planted on 2.13 acres. Adding this plot provided natural beauty as well as food sources for insects, which then attracts birds of many types who will nest nearby.

Boulders/Buckshot/Gravel Piles – Unlike most reclamation sites, the landowner requested the boulder piles be left in place to create a safe habitat for the animals, especially rabbits and bobcats. In addition, any leftover buckshot and gravel piles should remain available for future use.

Native Grass and Forbs/Legumes Planting – A 50-foot native grass buffer was planted along each side of the interior road and along the outside of the food plots to provide excellent winter cover and travel corridors for wildlife.



Roadside Berms A berm nearly 1,500 feet long was built alongside the East side of the property, running parallel to the nearest road, in order to prevent poaching. This raised bank also provides privacy for the landowner, and assists in reducing sound pollution from the nearby road traffic and railroads

Brome Grass Management – As the area becomes dominated with brome grass, plant diversity begins to suffer as less native grass species can compete and are squeezed out. A careful plan for spot spraying in fall and early spring was determined in order to keep a healthy mix of vegetation growth.



Ponds and Water Sources – Creating water holes, ponds, and small ravines would not only attract land and air dwellers, but also amphibious prey and insects that would become a critical food source. Four ponds were created from existing mining pits, grading and preparing each to effectively hold water, while directing storm water runoff and avoiding erosion along the waterways.

According to TG Hamm, “utilizing our available resources in the Wildlife Habitat Council and the Department of Wildlife, Parks and Tourism gave us the opportunity to anticipate problems we might encounter and afforded us the ability to go in with a written plan and clear objectives. The project was not typical of our normal reclamation work, and therefore took expert opinions outside of our normal resources and lengthened our timeline because of the specific requests of the landowner. This was never seen as an obstacle, but as an opportunity to invest in the local community and give back to Mr. Presslor, who graciously furnished his land for nearly three decades.

Mining this property for 30 years gave us ample opportunity to know Delbert on a personal level. Not only was he the landowner, but he became a partner in our efforts.

It was to our great disappointment that Mr. Presslor passed away in August 2017, just seven months before the completion of the project. Based on his wishes and his vision, we finished the project in the Spring of 2018. A year later, the Herrington site is established with rich vegetation and a steady increase of wildlife inhabitants. On any given day, overlooking from the highest elevation, the land below is alive and the spirit of Mr. Presslor lives on. It was a great honor to be a part of his legacy”.

NASLR's 2020 Mined Land Reclamation Award—Coal Demery Resources Company, LLC, Five Forks Mine

**Nominated by Danielle Duhé,
Louisiana Office of Conservation**

The Demery Resources Company, LLC Five Forks Mine has been awarded the 2020 NASLR Coal Reclamation Award. The mine is located near Saline in Natchitoches Parish, and is owned by Five Forks Mining, LLC (FFM), a wholly owned subsidiary of Advanced Emissions Solutions (AES). Demery Resources Company, L.L.C., a subsidiary of the North American Coal Corporation, has operated the mine since its inception in 2012. The mine has disturbed 489 acres of land and has concurrently reclaimed



183 acres with 32 acres currently in operation with active mining and reclamation projects. The remaining open acreage includes sedimentation control ponds and overburden stockpiles. The mine supplies approximately 220,000 tons of lignite feedstock annually to AES' carbon activation facility near Coushatta in Red River Parish.

Louisiana Surface Mining Regulations require that "rough backfilling and grading shall be completed within 180 days following coal removal and shall not be more than four spoil ridges behind the pit being worked, the spoil from the active pit being considered the first ridge. The mine uses a fleet of dozers operating 11.5 hours a day, five days a week to remove overburden and regrade the spoil material and the final cover. In Louisiana, mixed oxidized overburden with the native claypans is approved as a substitute for topsoil and subsoil, and a minimum of four feet is placed on the graded reclaimed surface. The mixing of the native clay soils with the oxidized material creates a more permeable soil layer, which aids in the management of stormwater. Once an area is regraded with the final four feet of mixed oxidized material, FFM puts down ground cover as soon as possible. If final regrading occurs outside the optimal growing season, the mine lays temporary ground cover and/or distributes a heavy mulch cover. FFM plants a combination of Bermudagrass and browntop millet in the spring and ryegrass in the fall to stabilize the landscape as quickly as possible. The commitment of concurrent reclamation is a critical component in the company's successful management of stormwater at this site. For example, the average annual rainfall in northwestern Louisiana is approximately 56 inches, punctuated with extreme storm events. A most recent example would be the 73.5 inches of rainfall in 2018.

FFM's accelerated contemporaneous reclamation approach results in improved operational efficiencies. Haul distances for the truck fleet are reduced, as backfilling and grading is typically occurring adjacent to the active mining operations. Five Forks Mine's accelerated contemporaneous reclamation approach saves an estimated \$355,830 annually - which is approximately 4.4% of the mine's total annual operating budget.

Accelerated concurrent reclamation requires conscientious long-range mine planning and operational commitment, above and beyond standard operational mine planning. This ensures that heavy equipment is dedicated to backfilling and grading as a normal part of the production process, and not as an afterthought. The resulting environmental and operational benefits are transferable to other truck/shovel surface mining operations throughout the United States.