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## RESOURCE STEWARDSHIP

# Naturally Establishing Native Grasses in a Former Pasture: A Case Study

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In the previous issue of *Alabama Wildlife*, I presented a case study on how landowner Danny Strock artificially established (i.e. planted) native grasses in a former row crop field. As with many restoration sites, the native seed bank in the field was severely depleted, requiring the artificial establishment of native grasses to accomplish Danny's wildlife habitat goals. The Alabama Wildlife Federation (AWF) provided technical guidance for the project while Danny performed the work to establish quality grassland habitat. Likewise, I will present another case study on how AWF worked with Danny and landowners Dr. Lotfi Bashir and Mrs. Bonnie Bashir to naturally establish native grasses in a former pasture.

The former pasture is owned by the Bashirs and located adjacent to Danny's property in Dallas County. The site was historically a native grass prairie, but was converted to an exotic grass pasture many years before the Bashirs purchased the property. After the cattle operation ceased, eastern red cedar and other woody vegetation invaded the site; furthermore, the lack of management over time allowed woody vegetation to advance. These conditions are characteristic of thousands of acres throughout the Black Belt Prairie in Alabama. Where deer hunting is a priority, landowners have allowed woody encroachment due to the erroneous assumption that this is "good deer habitat." Thankfully, the Bashirs understand

that this is merely a fallacy and were committed to restoring prairie conditions that actually benefit deer.

Danny and the Bashirs work cooperatively to manage their properties for wildlife. They understand the value – to wildlife and them – to increase the amount of contiguous space being managed. The former pasture is approximately 85 acres and provided an opportunity to add more acres to the habitat management program. When Danny and I evaluated the site to determine a restoration strategy, we noticed that the small prairie remnants (small areas that were void of woody invasion) had an abundance of native grasses and forbs. Our initial discussions were focused on planting; however, our site evaluation suggested that a diverse, native seed bank existed and would allow us to naturally restore the grassland habitat. Removing the cedars was the first step in the restoration process. Unfortunately, fire was not an option for cedar removal due to advanced cedar growth and insufficient fuel (grass); consequently, Danny had to remove the cedars with a bulldozer. Although a bulldozer was used in this case, it's not always the best tool for reclaiming grassland prairies. A feller buncher or woodland grinder may be best for removing cedars on prairie sites with shallow soils and/or high erosion potential. The low erosion potential, adequate amount of top soil, and rich native seed bank



Signs of bedding and droppings show deer use of the prairie has increased substantially since it was restored.



**Native forbs can be found throughout the prairie.**



of the Bashir's prairie allowed for the use of a bulldozer without reducing the restoration potential. Regardless of the tool(s) used to reclaim a prairie from woody invasion, the key is to remove the woody vegetation without reducing the restoration potential.

As native grasses began to re-colonize the site, fire was used to clean-up woody debris and facilitate grassland establishment. Mowing is used periodically to remove woody vegetation that escapes the effects of fire; however, fire is used as the primary management tool. The prairie habitat has developed as expected, with an abundance of indiangrass, little bluestem, and a diverse forb community. The restored habitat now provides abundant food and cover resources for a suite of wildlife species. White-tailed deer – the species of primary concern – are seen with great regularity in the restored grassland habitat.

Planting native species is often the best option for restoring grassland habitat; however, artificial establishment is not always necessary. Landowners and managers should examine a site carefully to determine its restoration potential before making the decision to plant. Like the Bashir's prairie, natural establishment of grassland habitat should be the goal if a diverse, native seed bank exists. This case study illustrates how ecological knowledge and proper decision-making can contribute to successful natural establishment of grassland habitat. It also illustrates how neighboring landowners with a commitment to cooperation can contribute to grassland conservation. 🌱

**Once a pasture, this area now provides quality grassland habitat for wildlife.**