

The POWER of Restoration

Unique partnership revitalizes native bobwhite habitat

By Darrell E. Townsend II, Ph.D.

The Grand River Dam Authority (GRDA) operates and maintains nearly 2,000 miles of rights-of-way, transmitting electricity to customers in Northeast Oklahoma and portions of Arkansas, Kansas and Missouri. The rights-of-way provide a unique partnership opportunity between GRDA and Quail Forever. Generally those rights-of-way range from 100 to 250 foot wide (totaling 24,000 to 36,000 acres) and are actively managed and sprayed on a four-year rotation. Specialized crews, certified and licensed by the Department of Agriculture in the State of Oklahoma, work in concert spraying, trimming, cutting, and mowing to keep these rights-of-way accessible to provide low-cost, reliable electric power to thousands of customers, located within the historic range of the northern bobwhite (*Colinus virginianus*).



along with Vice President, Chris Cornish; both compelled to reverse this trend, approached GRDA's Office of Ecosystems Management about a potential partnership between Quail Forever and GRDA.

"After further discussion and forethought the partnership began to take shape as we quickly realized that GRDA's extensive rights-of-way provided the necessary means (within GRDA's jurisdiction) and the perfect

opportunity to enhance bobwhite habitat," said Free.

With full support from GRDA's Chief Executive Officer, Kevin Easley, the partnership was born.

Throughout much of northeast Oklahoma, native bobwhite habitat has been replaced by monocultures of introduced fescue or Bermuda grasses or overrun with woody vegetation with little grass cover in the understory.

"These types of threats associated with monocultures of densely populated trees or introduced grasses have been widely known by biologists and quail enthusiasts for years and have been well publicized," said Terry Free, Oklahoma's Indian-Territory Chapter President of Quail Forever.

These monoculture threats are also the primary concern and focus for Free, where introduced pastures of Bermuda and fescue have progressively replaced native rangeland throughout much of Northeast Oklahoma. Free

GRDA's Brent Davis, private land owner Chris Arnett, and Oklahoma's Indian-Territory Vice-President of Quail Forever Chris Cornish prepare to restore native grasses and forbes in a previously fescue dominated right-of-way in northeast Oklahoma.



GRDA and Quail Forever decided to cooperate with private land owners and formally introduced the “POWER” (Private Owners Working for Ecosystem Restoration) program.

“The POWER program was a perfect match between these two entities as it is consistent with the legislative mandate of the GRDA that establishes the agency as a conservation and reclamation district and Quail Forever whose primary mission is dedicated to bobwhite habitat management,” said Easley.

This program creatively blends the needs of GRDA, Quail Forever, and bobwhite enthusiasts as it promotes and supplies the necessary tools required to implement sound wildlife management practices on private lands. The POWER program also provides technical assistance to landowners



Producing the right mix of bare ground and native grasses is an essential component of bobwhite habitat management.

through coordination with biologists from Quail Forever and those within the Office of Ecosystems Management of GRDA. The management practices implemented through this program promote the restoration of native vegetation, rather than simple food plots, to provide both nesting and

brood rearing habitat for bobwhites. The heterogeneous mixture of native grasses and forbs provide added benefits for numerous wildlife species and promotes diversity.

Private landowners enrolled in the program commit to conservation and restoration. Their commitment qualifies them for technical assistance, tools and supplies and in some cases labor, associated with implementing the vegetation management techniques prescribed by Quail Forever or GRDA’s Office of Ecosystems Management biologists. Enrolled landowners will be taught the importance of heterogeneity and native grass restoration to bobwhite recruitment and will be discouraged from mowing rights-of-way during the nesting season. Members of the POWER program will be provided education materials associated with sound wildlife habitat manage-



Terry Free, Oklahoma’s Indian Territory Chapter President of Quail Forever sifts through a native seed mix that was planted along a GRDA right-of-way in early spring.



Properly managed right-of-way restoration can provide bobwhite nesting and brood rearing habitat previously unavailable in densely populated, unmanaged woodlands.



Fat content found in native croton (pictured above) seeds are highly nutritious and provide an important energy source for bobwhites during the fall and winter months.

ment techniques, and public participation in implementing those techniques on enrolled lands will also be encouraged by Quail Forever members.

Management techniques will be designed to utilize moderate grazing (where applicable) and periodic disturbances (i.e. mowing, disking, prescribed fire, etc.) that can help create “patchy” landscapes conducive for bobwhite production. Such landscapes can maximize diversity while minimizing the spread of invasive species, pests or pathogens, and other damaging agents. This program will utilize best management practices and sustainable forestry methods when using fertilizers, herbicides, or other chemicals designed to prevent woody encroachments (the primary culprit associated with power outages nationwide) and help alleviate powerline

maintenance costs. Promoting native grasses and forbs conducive for bobwhite nesting and brood rearing activities, while simultaneously maintaining GRDA rights-of-way is the primary goal of the POWER program, a concept that implements sound ecological processes in a feasible and cost-effective manner. GRDA and Quail Forever encourage other electric providers to become members of the POWER program. Sound bobwhite management techniques will ensure long-term productivity of the managed rights-of-way.

Although the program is in its infancy, it is hoped that enrolled members will cooperate with neighboring landowners and GRDA will assist Quail Forever biologists and chapter members with landowner contacts for recruitment into the POWER program.



For more information on the **POWER** program, contact GRDA's Office of Ecosystems Management at 918-256-5545.