



WORKING LANDS FOR NORTHERN BOBWHITES

Good for Quail, Good for Cattle Operations

America's farmers, ranchers, and forest landowners are continuing to show how wildlife and working lands can prosper together. Let NRCS develop a comprehensive, resource conservation plan for your grazing operation and the northern bobwhite.

The northern bobwhite (*Colinus virginianus*), a type of quail, is often referred to as an "edge" species, seeking habitat where crop fields intersect with woodlands, pastures, and old fields. Before World War II, the way people managed lands favored this quail species, especially in the Midwest where producers grazed cattle on pastures of native grasses with scattered wildflowers and brush. The rise of non-native forage for cattle and advanced agricultural equipment that leaves behind fewer weeds and brush have both decreased available habitat. In particular, a rise in grazing cattle over non-native forage like fescue reduced habitat by 30 million acres and has caused the quail's numbers to dip by more than 80 percent during the past 60 years.

To help reconnect cattle and quail, NRCS is working with producers to manage for native warm-season

grasses that create productive and palatable grazing options for livestock while benefitting quail and other wildlife species. Common native warm-season grasses include switchgrass, big bluestem, eastern gamagrass, and indiangrass. These bunchgrasses provide the habitat that bobwhite need for escape and cover.

By replacing a percentage of non-native pastures with native ones, producers can benefit from diversified forage that is more resilient to drought and resistant to fungal endophytes found in fescue that impact herd health.

Operations that rely exclusively on common cool-season forages, such as fescue and orchardgrass, may find it increasingly difficult to stay above the bottom line. To help both producers and quail, USDA's Natural Resources Conservation Service (NRCS) and its partners are recommending producers go "old school" by grazing native forages once again.

Assistance Available




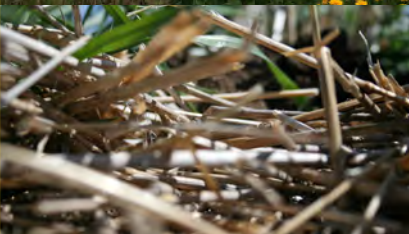


NRCS conservationists and wildlife biologists provide producers with technical assistance to develop a conservation plan as well as select which conservation practices are the best fit for their land. The Environmental Quality Incentives Program, Conservation Stewardship Program, and Agricultural Conservation Easement Program can provide financial assistance to help cover the cost of implementing those practices.










Conservation Choices

NRCS offers more than a dozen conservation practices that can benefit beef and “bobs.”

While implementing these practices solely to maximize cattle production is still beneficial to bobwhites, simple tweaks to a practice can yield even bigger benefits for quail. Here are a few examples:

	Conservation Practice	What Is It?	How Does It Help Northern Bobwhites?	How Does It Benefit Producers?
Access Control		Temporary or permanent exclusion of animals, people, vehicles, and other equipment.	Promotes sustainable grazing, which protects nesting areas.	Excludes cattle during establishment of native forages. Improves natural resources in specific areas. Increases aesthetics. Improves human health and safety. Protects vegetation.
Brush Management		Removal of invasive woody species in grasslands.	Increases herbaceous ground cover used for nesting. Note: About 30 percent shrub cover is recommended for bobwhite habitat.	Improves forage availability. Increases groundwater recharge. Reduces soil erosion. Provides wildlife habitat. Reduces risks of catastrophic wildfires
Conservation Cover		Permanent vegetative cover of native grasses, legumes and forbs.	When native plants are used, provides nesting, feeding, escape, and brood cover.	Increases plant pollination. Improves water quality. Reduces soil erosion. Provides wildlife habitat. Enhances plant diversity.
Cover Crop		Crops planted to temporarily protect the ground from wind and water erosion and supply living roots to the soil.	Attracts beneficial insects as important food source.	Provides livestock grazing during establishment period. Reduces soil erosion. Improves soil health. Increases organic matter. Increases water infiltration.
Fence		A permanent, portable or temporary constructed barrier to animals or people.	Controls access to grazing paddocks allowing rest periods, which yields better habitat.	Separates paddocks for rotational grazing. Improves forage production. Protects sensitive areas, reduces erosion, and improves water quality.
Field Border		A strip of perennial vegetation established at the edge or around the perimeter of a field.	When native plants are used, provides nesting, escape, and roosting cover.	Reduces wind erosion. Filters nutrients and improves water quality. Increases plant pollination. Provides wildlife habitat. Enhances plant diversity.

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 <p>Firebreak</p>	<p>A permanent or temporary strip of bare or vegetated ground designed to allow for the removal and management of fuel to prevent the progress of forest fires.</p>	<p>When legumes or cover crops are planted, serves as dusting, brooding, or feeding sites.</p>	<p>Boosts pasture productivity. Enhances native plant communities. Improves wildlife habitat.</p>
 <p>Forage and Biomass Planting</p>	<p>Planting grass and legumes suitable for pasture, hay or biomass production.</p>	<p>Allows grazing as a management tool to create the desired habitat.</p>	<p>Replaces endophyte-infected fescue and other poor-producing cool-season forages with productive, nutritious, and perennial summer forages. Reduces feed and fertilizer costs. Improves water quality. Reduces soil erosion.</p>
 <p>Hedgerow</p>	<p>Dense woody vegetation planted in a linear design.</p>	<p>Provides food, escape cover, and travel corridors.</p>	<p>Improves water quality and air quality. In some cases, provides early nectar sources for pollinators. Provides shelter for wildlife. Improves aesthetic value.</p>
 <p>Herbaceous Weed Control</p>	<p>The removal or control of herbaceous or non-woody plants.</p>	<p>Controls invasive species that compete with beneficial native vegetation.</p>	<p>Improves forage availability. Restores native plant communities.</p>
 <p>Prescribed Burning</p>	<p>Fire applied to manage grassland, forestland, pasture land, wildlife areas, or hayland within a prescribed set of conditions and dates.</p>	<p>Reduces thatch aiding in movement. Note: The timing of burns can increase or decrease forbs, grasses, and shrubs.</p>	<p>Improves forage quality and quantity. Controls plant disease and undesirable vegetation. Reduces wildfire hazards. Enhances seed production. Manages native plant diversity/composition.</p>
 <p>Prescribed Grazing</p>	<p>Managing pastures and rangeland to prevent overgrazing and to manage for high-quality forage.</p>	<p>Shrubs are necessary for thermal and escape cover. Bobwhites highly depend on shrub cover.</p>	<p>Reduces erosion. Increases water quality and air quality. Improve aesthetics. Provides wildlife habitat. Increases plant pollination. Controls snow drifting.</p>
 <p>Tree and Shrub Establishment</p>	<p>Establishing woody plants in non-forested areas by planting seedlings, container and potted plants, cuttings, or by direct seeding.</p>	<p>Woody structure provides important thermal and escape cover.</p>	<p>Reduces erosion. Increases water quality and air quality. Improves aesthetics. Provides wildlife habitat. Increases plant pollination. Controls snow drifting.</p>



Natural Resources Conservation Service

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Benefits to You

The variety of conservation practices available help producers improve productivity and address natural resource concerns on their land.

In addition to improving soil and water quality, grazing native warm-season grasses can boost livestock productivity during the hot summer months when cool-season non-native forages go dormant (commonly known as the “summer slump”). Recent research from the University of Tennessee’s Center for Native Grassland Management shows that native warm-season grasses provided more and timely forage during the summer, and equal if not better weight gains. Natives also decrease feed and fertilizer costs, alleviate effects of fescue toxicosis, and their use allows rest periods for other types of pastures.

Other conservation practices like planting wildflowers and native shrubs can further enhance a property’s value to pollinators and other wildlife. Greater plant and wildlife diversity on agricultural lands can reduce issues with common agricultural pests, improve pollination of crops and increase hunting opportunities.

Bobwhites and Wildlife

Bobwhite, other grassland birds, and pollinators benefit when native vegetation is incorporated into prescribed grazing systems. Positively impacted grassland birds include: dickcissel, grasshopper sparrow, Eastern meadowlark, Henslow’s sparrow, prairie warbler, and Eastern kingbird. Good habitat for bobwhite also benefits wild turkey, rabbits, woodcock, monarch butterflies, honey bees, and many others.

Targeting Resources

NRCS offers a wide variety of conservation practices that benefit quail. To accelerate conservation in the Midwest, NRCS is focusing resources through a project that is part of the Working Lands for Wildlife (WLFW) partnership, a collaborative approach to conserving habitat for declining species on farms and working forests. Through WLFW, NRCS provides additional technical and financial assistance to help producers in participating states implement practices. NRCS and partners aim to restore 150,000 acres of high-quality bobwhite habitat within the project’s focus areas.

Get Started

If you’re interested in maximizing cattle productivity while helping wildlife in need on your land, contact your local USDA Service Center to get started. NRCS accepts applications for conservation programs on a continuous basis. For more information on managing native forages for cattle, visit www.nrcs.usda.gov/wildlife.