

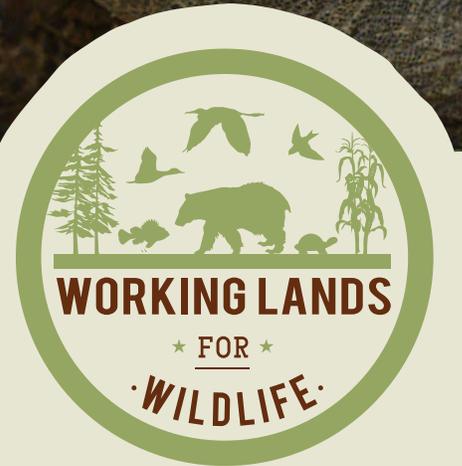


United States  
Department of  
Agriculture

Natural Resources  
Conservation Service



A Partnership for  
Conserving Landscapes,  
Communities & Wildlife





# Working Lands for Wildlife

Agriculture and wildlife both thrive through landscape conservation.



Working Lands for Wildlife's Lesser Prairie-Chicken Initiative helps ranchers maintain large and intact habitats by reducing cultivation of existing grasslands, removing invasive woody species and adopting sustainable grazing practices.



Ranchers have improved more than 1 million acres of grassland and prairie habitat on the Great Plains benefitting the lesser prairie-chicken and many other species.



"Raising cattle has made us more money every year than farming has — we're able to keep more. I'm 100 percent committed — I'm not going to tear this [project] out. It just works better for our operation to have cattle and grass." ~ Dwight Abell, Kansas rancher

# Working Lands for Wildlife



*"WLFW is the overarching concept of how NRCS works with partners and private landowners to focus voluntary conservation of working landscapes using target species as the barometers for success."*

~ Jason Weller, NRCS Chief

**T**wo-thirds of the land in the lower 48 states is privately owned, and these productive working farms, ranches and forests produce much of the country's food and fiber. These lands also provide much of our nation's open space and the habitats wildlife need. USDA's Natural Resources Conservation Service (NRCS) works in close partnership with agricultural producers and other conservation partners to maintain productive working landscapes while integrating wildlife-friendly conservation practices.

To better maximize the outcomes achieved through this win-win approach to conservation, NRCS launched the Working Lands for Wildlife (WLFW) partnership in 2012. WLFW is the overarching concept of how NRCS works with partners and private landowners to focus voluntary conservation of working landscapes using target species as the barometers for success. Target species are used because their habitat needs are representative of healthy, functioning landscapes where conservation efforts benefit a much broader suite of species. Successes achieved for wildlife are also wins for agriculture, as both are dependent on sustainably managed lands.

WLFW is a novel partnership that builds on decades of conservation efforts with forward-looking producers stepping up to conserve habitat for wildlife. This partnership has delivered many unprecedented successes over the years, and we now have a proven model, or "recipe," that works. We're proud of our collective past achievements and look forward to continuing our work with America's producers to conserve landscapes for future generations.

Jason Weller, NRCS Chief



By restoring longleaf pine forests, producers are helping the ecosystem's keystone species, the gopher tortoise, as well as more than 350 other species that depend on the tortoise for their underground burrows.



# Recipe for Success

**A**merica's farmers, ranchers and forest landowners are continuing to show how wildlife and working lands can prosper together. These achievements, occurring from the young forests of New England to the ancient sagebrush sea, all share commonalities – what we call our “recipe for success.”

The future of wildlife, agriculture and rural ways of life depend on our collective ability to transfer the WLFW conservation model to other landscapes and species.



*Recipe for Success* Natural Resources  
*From the kitchen of:* Conservation Service

**Trust and Credibility:** Taking a community, grassroots approach to conservation that's based on the principles of neighborliness.

**Shared Vision:** Finding the common link between wildlife and agriculture that invites cooperation over conflict.

**Strategic Approach:** Directing resources where the biological returns are the highest.

**Accountability:** Using science to measure conservation effectiveness and quantify outcomes.

**Leverage:** Multiply investments through partnerships to achieve more conservation.

**Regulatory Predictability:** Providing peace of mind to participating landowners so that we can enact conservation without concern over additional regulations under the Endangered Species Act.

The longleaf pine forests of the Southeast are among the most biologically diverse ecosystems in the Americas, home to up to 300 different understory plants in a square acre.



# Trust and Credibility

NRCS and partners work side-by-side with producers to support agricultural operations.



# Trust and Credibility

Government Agencies, Partners and Producers Work Together



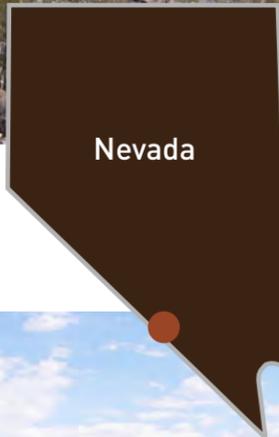
**N**RCS has an 80-year history of its staff working in rural communities. These well-worn paths to producers' front doors result in customized plans that balance the needs of wildlife and sustainable agricultural operations. Voluntary conservation succeeds only through trust and credibility.

## Coming Together

The citizens of Oasis Valley, Nevada, know the importance of trust. The Amargosa toad only occurs in one place in America – a 10-mile stretch along the Amargosa River. The toads rely on ponds and riparian areas that are fed by underground springs. In this arid region, water is precious. Water diversion, loss of habitat and invasive predators caused the toad's numbers to decline. As one local rancher, David Spicer, put it, residents in the area are leery of government. And when word spread that the Amargosa toad was under consideration for Endangered Species Act (ESA) protections, people began to worry.

The local Amargosa Toad Working Group assembled in 1994 to foster conservation efforts for the toad as well as build trust between local ranchers and government agencies. Over the years, trust formed, leading to the voluntary restoration of 11 springs, one mile of the Amargosa River and improvements on 57 acres of habitat on private lands.

NRCS worked side-by-side with local ranchers to adopt conservation practices, or best management practices, that were good for both the toad and ranchers' operations. This collaboration resulted in the toad's rebound, and in 2010, the U.S. Fish and Wildlife Service (FWS) determined ESA protections were not warranted.



Nevada

The Amargosa River is an intermittent waterway that runs mostly underground with occasional ponds like these forming above ground. These ponds provide habitat needed by the Amargosa toad and other species.



Isolated by 35 miles from all other toad species, the Amargosa toad is found nowhere else in the world.



NRCS worked with ranchers to restore and protect ponds and other wetlands along the Amargosa River.

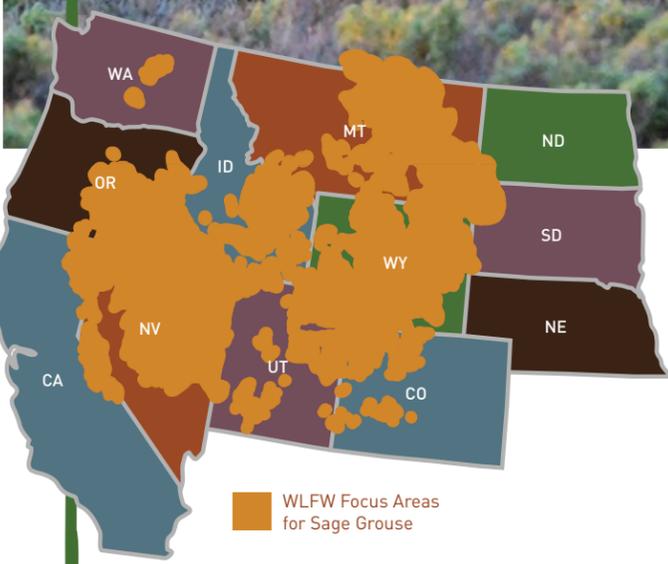
*"I knew that if I demonstrated to the community trust in these government agencies, that my neighbors would see them as our friends – not our enemies."*

~ David Spicer, Nevada rancher and businessman

# Shared Vision

Conservation improvements are a win-win, both for agricultural producers and wildlife.





Out West, sage grouse and cattle are among the many wildlife species that are home, home on the range.



Restoring habitat for sage grouse benefits 350 other species, including songbirds, mule deer and antelope. After invading conifers were removed in Oregon, scientists noticed spikes in the populations of two sagebrush-dependent songbirds, the green-tailed towhee by 81 percent and the Brewer's sparrow by 55 percent.

# Shared Vision

Conserving the Landscape, Benefiting Agriculture and Wildlife



*"It's been a win-win situation for our wildlife and our operation."*

~ Steve Pokorny, Wyoming rancher

**F**ifty male sage grouse dance to the rising sun. Brewer's sparrow trill a dawn song. Cattle graze nearby. Welcome to the world of sage grouse country, one of the best places to illustrate how wildlife and agriculture can thrive in harmony. It's true: what's good for the herd is good for the bird.

Through WLFW's Sage Grouse Initiative (SGI), ranchers are improving the sage-steppe ecosystem for livestock and sage grouse by addressing threats that are common to both. For example, cutting invading conifer trees allows ranchers to restore the native vegetation and water sources, mutually benefitting livestock and wildlife.

Since 2010, ranchers have voluntarily made grouse-friendly improvements to more than 5 million acres of private lands, part of a landscape-level collaboration to help heal the sagebrush landscape and enable sage grouse to rebound. The outcomes of this monumental effort led to Department of Interior's historic announcement in September 2015 that sage grouse do not require protection under the ESA.

### Paving the Way

The "sage grouse story" and WLFW has amplified the importance of voluntary conservation and has become the new model for conserving wildlife on private working lands. This approach supports cooperation over conflict and represents the common bond between wildlife and agriculture.

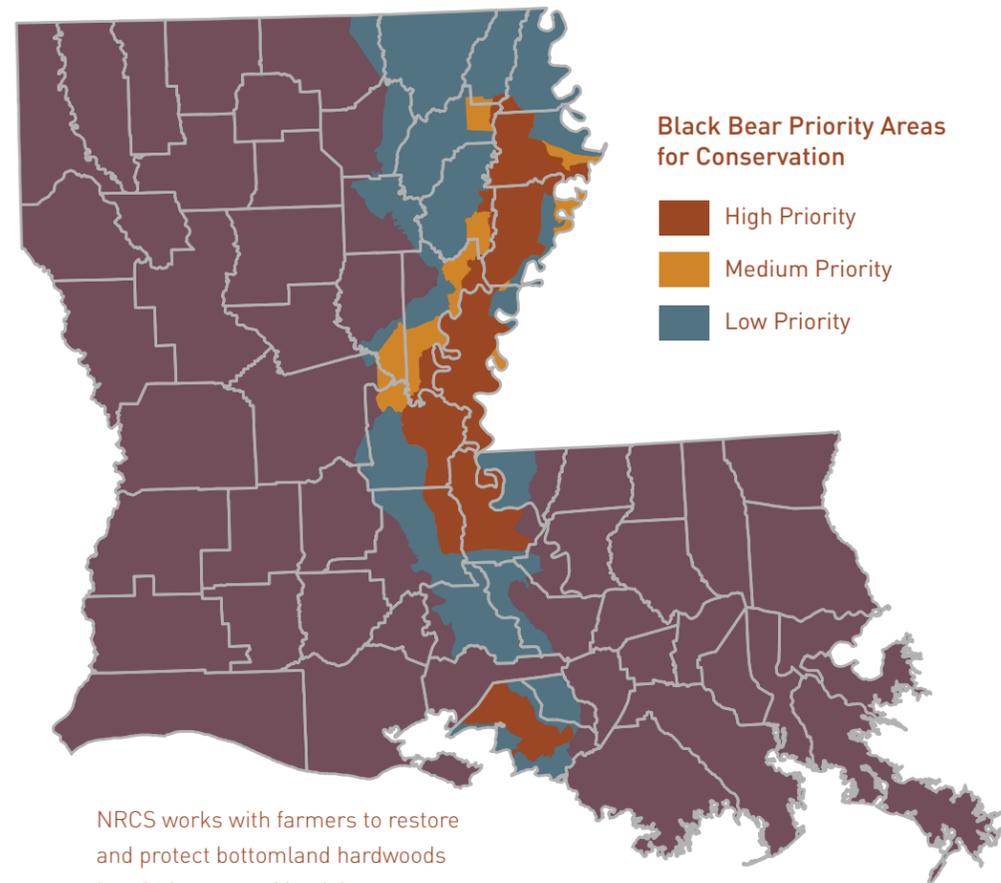


# Strategic Approach

WLFW strategically invests where conservation returns are highest.

# Strategic Approach

Focus Where Success Will Be Highest



NRCS works with farmers to restore and protect bottomland hardwoods in priority areas of Louisiana.



The Louisiana black bear is one of 16 subspecies of American black bears, and the inspiration for the teddy bear. After a 1902 hunting trip to Mississippi, President Theodore Roosevelt refused to shoot one that had been trapped and tied to a tree by members of his hunting party. The episode was featured in an editorial cartoon in *The Washington Post*, sparking an idea from a Brooklyn candy-store owner to create the “Teddy” bear.



Darren Boudreaux with NRCS holds Louisiana black bear cubs, one of a half dozen recorded litters on lands with NRCS conservation projects.



*“During my career, I’ve seen the Louisiana black bear listed, and because of the work on private lands, then delisted. It’s been rewarding to watch us stitch together prime black bear habitat across private lands through strategically placed conservation easements.”*

~ John Pitre, NRCS state resource conservationist

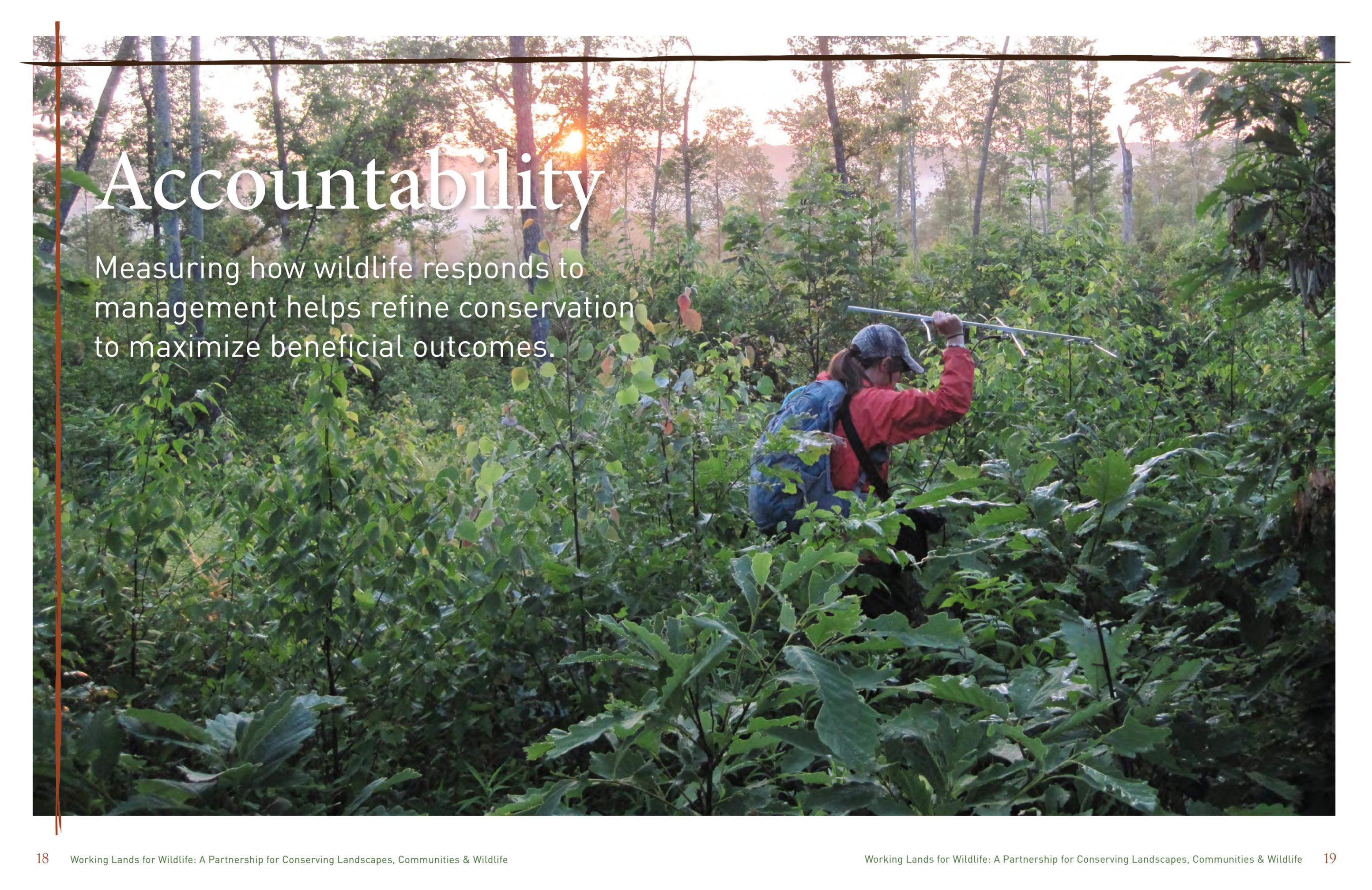
Louisiana black bears were in trouble. The region’s highly fertile soil led to the historic conversion of bottomland hardwoods to cultivated cropland during the 1960s and 1970s when soybean prices reached record highs. By 1992, the bear lost 80 percent of its habitat and biologists estimated fewer than 200 remained, prompting the FWS to list the species on the federal lists of threatened and endangered wildlife.

## Targeting Priority Areas for Conservation

By strategically working with producers to restore bottomland hardwood forests in the alluvial valley along the Mississippi River, NRCS and partners were able to put the once-threatened Louisiana black bear on a path to recovery. The partnership aimed to get the largest return on investment by targeting efforts where they can most benefit the species.

NRCS first worked with partners to create black bear priority areas for conservation and then focused efforts to restore and protect more than 250,000 acres of black bear habitat through the former Wetlands Reserve Program (WRP). By strategically restoring and placing these difficult-to-farm lands into conservation easements, producers maintained a steady source of income while improving habitat for black bears and other wildlife. In total, NRCS and partners helped establish and protect more than 800,000 acres of habitat in the region.

This work played an integral role in the recovery of the Louisiana black bear, leading FWS to delist the bear in March 2016.

A person wearing a red jacket, a blue backpack, and a grey cap is using a surveying instrument in a dense forest. The sun is setting in the background, creating a warm, golden glow. The person is holding a long, thin instrument, possibly a theodolite or a similar surveying tool, and is looking through it. The forest is filled with green foliage, and the trees in the background are silhouetted against the bright sky.

# Accountability

Measuring how wildlife responds to management helps refine conservation to maximize beneficial outcomes.



WLFW Focus Areas for Golden-winged Warbler

The diverse hardwood forests of the Appalachian Mountains provide valuable nesting habitat for the golden-winged warbler, which winters in Latin America and nests in the Appalachians and upper Great Lakes.



During that past 50 years, the golden-winged warbler has experienced significant population declines throughout much of its breeding range in part because of the loss of young forest the bird needs for nesting.



Improving golden-winged warbler habitat benefits many other species, including both game and non-game species. Assessments have now documented specific benefits for American woodcock, indigo bunting, eastern towhee and prairie warbler.

# Accountability

Outcomes Improve Conservation Efforts



**K**arli Rogers aims her radio-telemetry antenna towards a marked bird in a regenerating forest. The biologist is following the beeps as she makes her way through the dense understory. There she finds a young golden-winged warbler being fed by an adult, a sign of progress, showing habitat restoration is working.

## Measuring Success

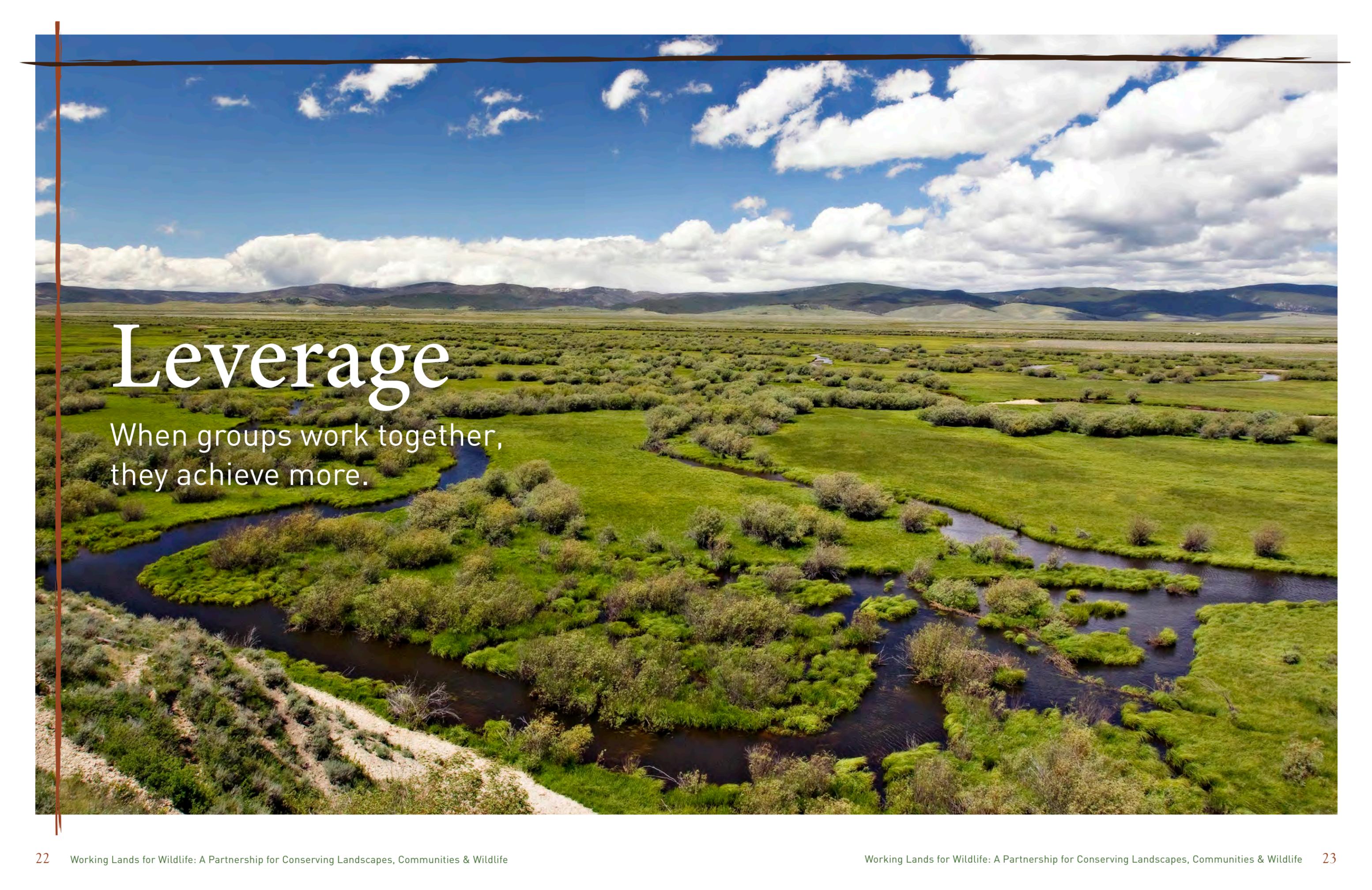
WLFW uses science to measure the biological benefits of habitat improvements. The golden-winged warbler is one of the target species of WLFW, and NRCS has been working with biologists to measure the bird's response to sustainable forestry practices, such as harvesting mature timber, controlling invasive plants and using prescribed fire.

This is the largest assessment of its kind for measuring the bird's response to targeted habitat management. So far, biologists are noticing many species of imperiled songbirds on lands managed with these NRCS conservation practices. They've estimated three golden-winged warbler male territories for approximately every 50 acres of well-managed forest. Managed sites provide habitat for more than 120 bird species, and more than a third of those – like the golden-winged warbler – are suffering significant population declines.

NRCS and partners have already collected four years of data and plan to continue this effort. It's not just scientists who want to know how plants and wildlife are responding, producers do as well. NRCS and conservation partners will continue assessing outcomes of conservation to quantify success and best guide future efforts.

*“Science-based evaluations are used to measure the biological response of wildlife populations to conservation, assess effectiveness, quantify results and adaptively improve program management.”*

~ Dr. Jeff Larkin, Golden-winged Warbler Breeding Habitat Coordinator, Indiana University of Pennsylvania - Research Institute and American Bird Conservancy



# Leverage

When groups work together,  
they achieve more.



Montana

The distinct sail-like dorsal fin of the Arctic grayling set this species apart from other members of the Salmonidae family, which include salmon, trout and whitefish.



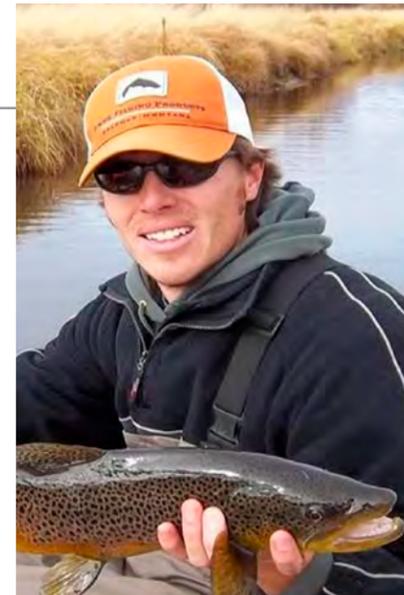
During the past 15 years, NRCS, conservation partners and producers have worked together to boost numbers of fluvial Arctic grayling.



The fluvial Arctic grayling travels many miles each year between seasonal habitats. Fish ladders installed in irrigation structures prove extremely effective at managing irrigation flows and the passage of fish.

# Leverage

A Collaborative Approach to Conservation



In the West, water reigns supreme. Livelihoods depend on it. WLFW helps clean and conserve water for working lands, communities and wildlife. Through collaboration, conservation partners achieve more success for species conservation than working alone.

In the spectacular Big Hole River in southwestern Montana, NRCS paired up with other state and federal agencies and producers to help the fluvial Arctic grayling. Reduced stream flows, degraded riparian habitat, and man-made migration barriers contributed to the historic decline of this freshwater fish.

## Pulling Together Partners

NRCS partnered with the FWS, Montana state agencies and non-government organizations to accelerate conservation activities that helped the trout-like fish. Through a Candidate Conservation Agreement with Assurances, the partnership worked with Montana ranchers to use water wisely, improve riparian habitat, remove barriers to fish migration and reduce the risk of fish swimming into unsuitable habitat. Ranchers installed a variety of conservation practices from fencing to fish ladders, resulting in positive changes to the once-declining fish.

Over the last 10 years, this grayling population has demonstrated that it has high genetic diversity and has significantly increased its effective population size. The grayling's rebound was mostly attributed to the effective public-private partnership that led to better habitat for the fish. In 2014, the FWS determined that protections under the ESA were not needed.

*“This partnership is living proof that by working together, we can conserve rural ways of life, support local communities and have abundant wildlife.”*

~ Kyle Tackett, NRCS district conservationist for Beaverhead County, Montana



# Regulatory Predictability

Producers implementing conservation have peace of mind knowing they will not face additional regulations.



# Regulatory Predictability

Keeping Working Lands Working



**A**sk any producer what they fear about the ESA, and you will likely hear one word: regulation. Producers' livelihoods depend on the land.

## Providing Peace of Mind

To further encourage voluntary conservation, NRCS partnered with the FWS to provide ESA predictability to participating landowners. These actions exempt landowners from impacts to the species that may be caused by the implementation and maintenance of conservation practices. Akin to an insurance policy, predictability provides landowners with peace of mind that – no matter the legal status of a species under ESA – they can keep their working lands working with NRCS conservation systems in place.

Take for example, the New England cottontail, the region's only native rabbit, which is benefiting from WLFW. By controlling weeds and re-establishing native shrubs and trees on more than 7,700 acres, hundreds of producers are increasing the amount and connectivity of early successional habitat needed by the cottontail and more than 60 other species, such as woodcock, ruffed grouse and snowshoe hares.

The resulting conservation efforts proved extremely successful, and the population is on the rebound. In fact, the FWS decided in 2015 that as a direct result of the proactive conservation implemented, the New England cottontail no longer required listing under the ESA.

*"I've worked with many landowners across the state who are committed to helping the New England cottontail on their private property. It's great to see how WLFW is helping these landowners improve their lands while also creating top-notch habitat for other species."*

~ Don Keirstead, NRCS state resource conservationist

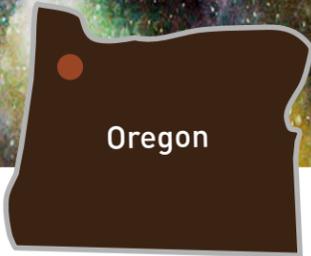


Restoration efforts on private lands in New England played an instrumental role in the New England cottontail's rebound, according to the FWS in its 2015 determination not to list the species.



New Hampshire landowners Rick and Donna Ambrose worked with NRCS to restore 60 acres of cottontail habitat.





The Oregon chub was the first fish in history to be removed from the federal list of threatened and endangered species.

# Recovery in Action

Conservation Efforts Paying Off



**B**ig things come in small packages. The first fish in the history of the ESA to be delisted because of recovery is the Oregon chub, a small olive-and-silver minnow native to the Willamette River in Oregon.

When the FWS listed the fish in 1993, only eight populations remained. NRCS stepped in with private landowners to create, restore and protect habitat for the chub. The chub signaled that the collaboration among partners and agricultural producers to restore and protect habitat was working. Today, the number of populations has increased more than 10-fold, with 80 known populations comprising this recovered species.

*The Oregon chub prefer off-channel habitat, such as beaver ponds, oxbow lakes, backwater sloughs and marshes. Landowners like David Budeau are working with NRCS to restore wetland habitats for chub.*

### More Success

Similar successes in conservation are becoming evident in the seven WLFW priority landscapes designated in 2012 across the country. Largely because of voluntary conservation actions in Nevada and California, FWS determined ESA protection was no longer warranted for the Bi-State sage-grouse in April 2015. This was a precursor to the unprecedented collaboration in public and private rangeland restoration that led to the FWS' decision in September 2015 not to list the greater sage-grouse across 11 western states. During that same month on the East Coast, efforts to restore young forests resulted in a no-list decision for the New England cottontail.

While NRCS celebrates these accomplishments to help species rebound, the work is far from over. NRCS continues to invest in long-term conservation planning for target WLFW species.

## Conservation Successes

						
<b>Fluvial Arctic Grayling</b>	<b>Oregon Chub</b>	<b>Bi-State Sage-Grouse</b>	<b>Lesser Prairie-Chicken</b>	<b>New England Cottontail</b>	<b>Greater Sage-Grouse</b>	<b>Louisiana Black Bear</b>
<i>Not listed, August 2014</i>	<i>Delisted, March 2015</i>	<i>Not listed, April 2015</i>	<i>Not listed, September 2015</i>	<i>Not listed, September 2015</i>	<i>Not listed, September 2015</i>	<i>Delisted, March 2016</i>



It's all of our jobs to conserve natural resources for future generations. Producers have stepped up, sowing seeds for healthy landscapes and wildlife populations. These forward-thinking men and women are caring for wildlife, producing the food and fiber the nation needs and strengthening the backbone of rural communities across the country. WLFW provides producers with the tools they need as well as a network of support and science to best conserve habitat. Producers interested in assistance from NRCS can learn more at [nrcs.usda.gov/wildlife](http://nrcs.usda.gov/wildlife).



*"It's quite impressive to see what can happen when all the horses are pulling the same direction in the harness."*

~ Larry Hicks, Director of the Little Snake River Conservation District, WY



NRCS will continue to shape conservation efforts as new science is developed and new challenges arise. For example, in response to the Deepwater Horizon oil spill, NRCS worked with landowners to quickly create 470,000 acres of alternative habitat for migratory birds headed south for winter.

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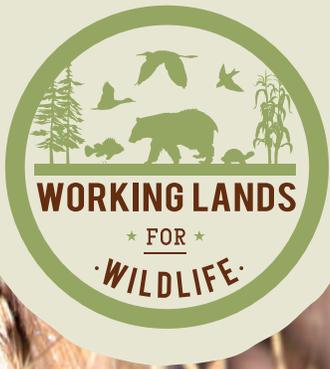
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