

# LANDOWNERS MATTER

## NEWSLETTER



# LIVESTOCK AND WILDLIFE: THE PERFECT COMBINATION

ERIC MAGEDANZ | SENIOR PRIVATE LANDS HABITAT BIOLOGIST

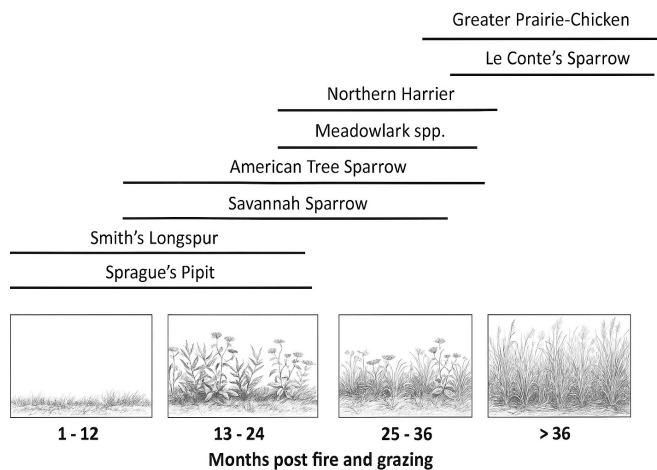
The spring and summer months in South Dakota offer the occasional opportunity to sleep with a cracked window at night. Sounds quiet and relaxing. I live with my family on one of pastures of the family's farm and let me tell you, there's a lot going on out there. Whether it's a midnight bull bellowing, the random 2 a.m. dickcissel singing, which still confuses me and probably him, or the array of 5 a.m. grassland birds setting up breeding territories, an open window guarantees a midnight trek to put it in reverse or an early start to the day. You're more likely to hear me brag than complain.

Our South Dakota grasslands are critically important not only for the prairie obligate wildlife species reliant on them but also for the 16,000+ cattle producers in the state that sustain South Dakota's #1 industry. Surprising to many, what's good for one is good for the other. From a livestock producer's perspective, managing grassland for cattle and rangeland health can take on many different appearances but key grazing management tenets rise to the top. Generally, plant species are divided up into two different categories depending on their growth tendencies, cool season and warm season. When rotationally grazing, starting in a different paddock or pasture every year prevents the same plant species from being targeted by cattle the same time every year. This allows plants to rest and put down deeper roots, increasing their productivity, drought resiliency,

and reproduce from either seed or vegetatively. The same principle applies to grazing intensity, regardless of the time of year. You may have heard of the adage "take half, leave half". The amount of leaf volume removed has a direct correlation on root growth. At 50% removal of above ground growth, only 2-4% of root growth ceases. At 60% removal, 50% of root growth ceases and after 70% and greater, 75 to 100% of root growth stops and as root growth stops as does above ground growth. As mentioned, this has a profound effect on overall grass health, drought resistance, and productivity. Rotating cattle through paddocks or pastures enables producers to better manage grazing intensity to

this could be looked at as money in the bank. The contribution of litter to the ground shades the soil, keeping it cooler and retaining moisture. Litter, in tandem with hoof action, contributes to soil organic matter leading to healthier soils, greater water infiltration, and water holding capacity. These factors, deeper roots, adequate plant recovery, healthier soils, and more water, culminating to more vigorous plants. In terms of harvest efficiency, as stock densities go up such as when cattle are grouped and rotated versus season long use, cattle are less selective of plant species and tend to graze more of what's out there leading to higher harvest efficiency.

We've talked a lot about grazing management for cattle but what's in it for wildlife? Let's start back at the top. Switching up the grazing timing each year promotes greater plant diversity. Grazing activity suppresses species growing during that period which affords other species to express themselves. For instance, grazing in early spring suppress the growth of smooth brome and can promote the growth of warm season grasses like big bluestem and switchgrass. Forbs, or flowering plants, also increase, taking advantage of this open space. As we know with the monarch butterfly and common milkweed, many forb species are host



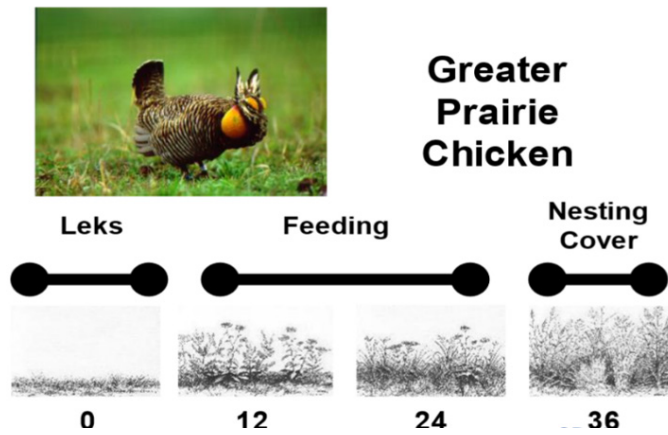
Hovick, T. J., R. D. Elmore, and S. D. Fuhlendorf. 2014. Structural heterogeneity increases diversity of nonbreeding grassland birds. *Ecosphere* 5(5):62. <http://dx.doi.org/10.1890/E514-00062.1>

ensure overutilization is limited and adequate rest and recovery is provided. It's often debated that rotational grazing can limit grass utilization by cattle and lead to "waste" by trampling. While it can't be argued that cattle trample grass,

warm season grasses like big bluestem and switchgrass. Forbs, or flowering plants, also increase, taking advantage of this open space. As we know with the monarch butterfly and common milkweed, many forb species are host

plants for a variety of insect species. As cattle are moved through a network of units, grazing creates a patchwork of vegetation with varying amounts of height and density. This structural mosaic provides habitat for a multitude of species that select for their preferred habitat structure. Grassland dependent species provide a great illustration of

habitat type during their life cycle. Prairie grouse congregate on communal breeding sites of low vegetation stature each year to increase breeding display visibility. Nesting sites are characterized by moderate to high vegetative height and density while quality brood rearing cover consists of an interspersed of open ground and forbs with denser escape cover nearby. Well managed pastures not only produce a healthy and productive livestock herd but also important wildlife habitat. This symbiotic relationship is what drives conservation entities and organizations to assist ranchers with the installation of practices that support their livestock operation.



this. Some species have a preference for short, sparse cover while others select for the tallest, densest vegetation they can locate. Some species, like prairie grouse, utilize each

As I write this article, I'm thinking about the great work our GFP Private Lands Habitat Biologists are doing right now as they assist our South Dakota producers in meeting their operational goals while enhancing pivotal habitat for wildlife. [For more information on how you can improve or sustain your grazing management or simply develop habitat for wildlife visit \*habitat.sd.gov\* to find a biologist near you.](#)

# FISH MANAGEMENT ON PRIVATE PROPERTY

**JAKE DAVIS** | FISHERIES PROGRAM ADMINISTRATOR

A common question that Game, Fish and Parks (GFP) staff receive from landowners is what can be done to stock fish in a waterbody on their property. There are examples across the state where fisheries are located on private land and there is often desire by the landowner to create and maintain a recreational fishery.

## PUBLIC STOCKING

- » GFP provides the fish from the state hatchery or from another public water body.
- » Requires the landowner to enter into a Fisheries Management Agreement
- » Allows public access to the water body.

## PRIVATE STOCKING

- » Landowners receive fish from a private hatchery.
- » Does not require public access to the waterbody.
- » **There are requirements that exist to ensure the health of the fishery and watershed. Contact your local Aquatic Habitat and Access biologist for guidance on these, as they will walk you through the process and ensure all requirements are satisfied successfully.**

## AUTHORIZATION

There is also an opportunity where GFP can grant "Landowner Authorization", which would cover potential stockings as well as other management activities on waters located on their property. Your local Aquatic Habitat and Access biologist can also work you through this process and what may be eligible.

CONTACT YOUR LOCAL AQUATIC HABITAT BIOLOGIST FOR MORE INFORMATION

# RESTORING CROPLAND BACK TO GRASSLAND

**JOHN MAYROSE | REGION 2 PRIVATE LANDS HABITAT BIOLOGIST**

Grasslands are one of the most endangered ecosystems in the world and many ranchers and farmers are vividly aware of the benefits of having grasslands on their properties. Whether it is for grazing, haying, or even recreation. South Dakota Game, Fish & Parks (GFP), along with many other partner agencies, have cost share available to help landowners with grassland establishment. GFP will cover 100% of the seed costs incurred, up to \$125/acre.



When designing a grass seed mix, it is important to look at soil types and previous management of the land. A seed mix that includes a diverse mix of native grasses and forbs is generally preferred.

One thing to keep in mind while re-establishing grasslands is that it takes time. In general, it takes about two to three years for a grass seeding to establish. For the first year or two, the primary growth occurs in the root system. Precipitation, weed competition, other environmental factors greatly influence how successful a planting will establish.

In this example from Stanley County, a landowner wanted to expand his ranching opportunities and had a desire to convert some cropland back to grass. After meeting with the landowner and going over his goals, we agreed that a dormant grass seeding in the fall would be best for this project. This grassland planting has taken well and is becoming fully established. In conjunction with this grassland restoration project, the landowner also enrolled these acres into the GFP Walk-In Area program to allow public hunting access. By doing this, the landowner was able to get additional cost share for the grassland restoration project along with a multi-year sign-on bonus and annual payments for enrolling his land into the public hunting access program.



## GOOD TO KNOW

# EPIZOOTIC HEMORRHAGIC DISEASE (EHD)

**JULIE LINDSTROM** | REGION 3 TERRESTRIAL RESOURCES SUPERVISOR

**H**emorrhagic disease, also known as epizootic hemorrhagic disease (EHD) or blue tongue, sporadically affects deer in South Dakota. The virus is spread by a biting flying insect referred to as a ‘midge’ and causes extensive internal bleeding and high internal body temperatures. Highly virulent strains of the virus result in the deer dying within 1 - 3 days. Some deer are genetically more resilient and exhibit no obvious signs and appear perfectly healthy, while others may show symptoms such as respiratory distress, fever, and swelling of the tongue. Affected deer will often attempt to combat the fever by staying in low lying areas or near water. This disease is not transmissible to humans.

Hemorrhagic disease is typically detected in late summer or early fall, when a combination of weather and habitat conditions result in optimal conditions for midges to hatch. Specifically, years with high precipitation in the

spring and early summer, followed by long stretches of minimal rain and high temperatures throughout the summer can result in exposed mud flats from receding wetlands and other water bodies. These conditions can produce a high volume of the biting midges which ultimately pass the virus to deer. Outbreaks can be locally severe and may sometimes affect a high proportion of the deer population in a management unit. Deer mortalities usually persist until the first hard frost kills the adult midges. In years with unusually high mortality, hunting license adjustments can be made to aid in population recovery. GFP relies on reports from landowners, hunters, and other members of the public to help assess the severity of deer loss due to disease outbreaks. If you see sick or dead deer, please report them to your local conservation officer or nearest GFP office. [More information on hemorrhagic disease can be found at: \*gfp.sd.gov/epizootic-hemorrhagic-disease/\*](https://gfp.sd.gov/epizootic-hemorrhagic-disease/)

## FARM BILL UPDATE

**MARK NORTON** | HUNTING ACCESS & FARM BILL COORDINATOR

**A**s of late July 2025, the 2018 farm bill is operating under its second extension that expires September 30th, 2025. The conservation title of the farm bill provides more funding for conservation on private working farms and ranches than any other federal or nonfederal source of funding. The passage of the reconciliation bill known as the Big Beautiful Bill at the beginning of July increased funding levels for most of the farm bill conservation title programs and authorized them through 2031. These include the Environmental Quality Incentive Program (EQIP), the Agriculture Conservation Easement Program (ACEP), Conservation Stewardship Program (CSP), and the Regional Conservation Partnership Program (RCPP). This means there will be more funding available for farmers and ranchers who choose to voluntarily implement conservation practices on their operations through the Natural Resources Conservation Service (NRCS) who is the agency within the U.S. Department

of Agriculture (USDA) that administers these programs. One farm bill conservation program that was not included in the reconciliation bill, was the Conservation Reserve Program (CRP). This includes the James River Watershed CREP and the Big Sioux River Watershed CREP projects. CRP is currently authorized only by the 2018 farm bill and will require another extension of that bill or a new farm bill to be passed to keep operating past September 30th, 2025. It is unknown if or when either of these will happen, but we are hopeful a new farm bill will be passed yet in 2025 .

If you are interested in how one of these programs can help you achieve your conservation goals, please contact your local USDA office or one of GFP's Private Lands Habitat Biologists which can be found at the end of this publication.

# NEW WILDLIFE DAMAGE

## MANAGEMENT HUB

**JIM NOBLE | GIS PROGRAM SPECIALIST**

South Dakota Game, Fish & Parks (GFP) has added options to the Wildlife Damage Management Hub! Landowners and property owners dealing with nuisance non-game wildlife or predator issues can now request service using the Wildlife Damage Management Hub. Although the services themselves haven't changed, the process for requesting services is now more convenient and efficient for staff and landowners both to track the information and location. Varmint Nuisance and Livestock Predator Request for Service are now online, live and ready, to help you protect your property and peace of mind.

The Varmint Nuisance program is designed to assist with problems caused by non-game animals like raccoons, skunks, opossums, or other varmints that may be causing damaging. Wildlife Damage Specialists offer technical advice to help you assess the situation and take appropriate steps to manage the problem effectively.

The Livestock Predator Request for Service program provides support for cooperators experiencing damage caused by predators such as coyotes or foxes that are threatening livestock or poultry operations. GFP staff can evaluate the issue and work with you to implement proven wildlife damage solutions. Because of the urgency of livestock depredation issues, you can still contact your regional Wildlife Damage Specialist directly to request service if necessary.

Call your local Wildlife Damage Specialist or visit the Landowners page on the GFP website to learn more about the wildlife damage programs and to submit a request for service in the Wildlife Damage Management Hub.



**SCAN TO WATCH A  
HOW-TO VIDEO**

## NEW EMPLOYEE SPOTLIGHT

### NEW PRIVATE LANDS HABITAT BIOLOGIST



**NAME:** Michael Peyton

**CONTACT INFO:** 605.391.1575 | Michael.peyton@state.sd.us

**COVERAGE AREA:** Butte, Harding, & Perkins counties

**ABOUT:** I grew up in Watertown and graduated from SDSU with a degree in Wildlife and Fisheries Science. After graduation I worked a few seasonal jobs with GFP and then bounced around several western states working for non-profit organizations like Pheasants Forever. I'm happy to be back in my home state working for GFP. In my spare time I will be

doing one of my several outdoor hobbies but come September I spend most weekends chasing upland birds with my dogs. I also enjoy fishing and traveling with my wife and two kids.

# HAVE UNPRODUCTIVE MARGINAL CROPLAND? CONSIDER THE WORKING GRASSLANDS PARTNERSHIP PROGRAM

**RYAN WENDINGER | HABITAT PROGRAM ADMINISTRATOR**

Ducks Unlimited, in partnership with South Dakota Game, Fish and Parks (GFP), is offering an opportunity for landowners to convert unproductive marginal cropland back into grassland through the Working Grasslands Partnership.

This voluntary program provides annual payments for 2-3 years to farmers, ranchers, and other landowners who seed cropland back to grass. Payments are based on the average CRP rental rate in the county where the land is located and are issued annually following the field season. In return, participants agree to defer grazing and haying for the first 2-3 years to ensure successful grass establishment.

Once the perennial grass cover is established, landowners are welcome to incorporate it into their operation. Grazing is allowed year-round, while haying must be delayed until after July 15 to protect nesting wildlife during the primary nesting season.

To further support this transition, GFP is offering 100% cost-share assistance, up to \$125 per acre, to cover the cost of seed for establishing grassland cover. Cost share assistance is also available for grazing infrastructure to help transition these new grassland acres into your livestock operation. This combination of technical assistance, annual incentive payments, and cost-share support offers a strong financial foundation for producers interested in making a long-term investment in their land's health and productivity.

Whether you're looking to improve your soil, increase your operation's profitability and resilience, or support wildlife habitat, the Working Grasslands Partnership offers a win-win opportunity.

Interested landowners should contact their local GFP Private Lands Habitat Biologist, which can be found in the back of this publication, for more information. Landowners interested in this program can also complete the online interest form found at, [tinyurl.com/WGP-RCPP](https://tinyurl.com/WGP-RCPP), to be contacted by a biologist.

Other partners involved with the Working Grasslands Partnership include South Dakota Grassland Coalition, South Dakota Soil Health Coalition, U.S. Fish and Wildlife Service, and Audubon Great Plains.

## RCPP RENTAL RATES \*CURRENT RATES ELIGIBLE FOR 2025

County	Rate/Ac
Aurora	\$124.00
Beadle	\$133.00
Bennett	\$33.00
Bon Homme	\$158.00
Brookings	\$196.00
Brown	\$159.00
Brule	\$106.00
Buffalo	\$80.00
Butte	\$31.00
Campbell	\$89.00
Charles Mix	\$145.00
Clark	\$154.00
Clay	\$210.00
Codington	\$170.00
Corson	\$46.00
Custer	\$20.00
Davison	\$160.00
Day	\$149.00
Deuel	\$178.00
Dewey	\$41.00
Douglas	\$144.00
Edmunds	\$109.00
Fall River	\$27.00
Faulk	\$103.00
Grant	\$154.00
Gregory	\$75.00
Haakon	\$50.00
Hamlin	\$189.00
Hand	\$110.00
Hanson	\$177.00
Harding	\$29.00
Hughes	\$92.00
Hutchinson	\$164.00

County	Rate/Ac
Hyde	\$81.00
Jackson	\$39.00
Jerauld	\$104.00
Jones	\$38.00
Kingsbury	\$154.00
Lake	\$205.00
Lawrence	\$25.00
Lincoln	\$232.00
Lyman	\$88.00
McCook	\$187.00
McPherson	\$98.00
Marshall	\$157.00
Meade	\$33.00
Mellette	\$36.00
Miner	\$151.00
Minnehaha	\$211.00
Moody	\$256.00
Pennington	\$33.00
Perkins	\$38.00
Potter	\$105.00
Roberts	\$167.00
Sanborn	\$128.00
Oglala Lakota	\$34.00
Spink	\$129.00
Stanley	\$48.00
Sully	\$90.00
Todd	\$31.00
Tripp	\$66.00
Turner	\$202.00
Union	\$223.00
Walworth	\$103.00
Yankton	\$199.00
Ziebach	\$36.00

# SOUTH DAKOTA GAME, FISH AND PARKS

## PRIVATE LANDS HABITAT PROGRAM

The goal of GFP's Private Lands Habitat Program is to help landowners establish, restore, or manage habitat on private land to enhance reproduction, recruitment, and survival of wildlife. Several program options are available to support management practices that emphasize healthy working grasslands. All projects are subject to approval by a GFP private lands habitat biologist. Cooperators must allow some amount of reasonable public hunting.

### FOOD PLOTS

- » Food plots must remain unharvested/standing through March 15.
- » Annual payment of \$20 per acre for food plot acres (\$80/acre for food plots enrolled in a public hunting access program).
- » Free food plot seed is available from GFP each spring (corn, sorghum, brood mix, big game mix).
- » Maximum of 20 acres per quarter section and unlimited total acres per landowner.

### WOODY HABITAT

- » Shelterbelt plantings
- » Shelterbelt renovations
- » Riparian shrub clump plantings
- » Hardwood release program

### GRASSLAND ESTABLISHMENT

- » Native grass and forb seed mixes are the priority and plantings must be at least 10 acres.
- » Landowners are reimbursed 100 percent up to a maximum of \$125/acre for seed costs.
- » Cost-share is NOT available on CRP or WRP plantings or hay land.
- » Additional incentives available if plantings are enrolled into public hunting access program.

### BROOD/POLLINATOR PLOTS

- » Designed to provide high-quality, native perennial habitat for broods and pollinators.
- » Landowners are reimbursed 100 percent up to a maximum of \$150/acre for seed costs.
- » Individual plantings must be a minimum of 2 acres and a maximum of 9 acres.

### GRASSLAND/GRAZING MANAGEMENT PRACTICES

- » To enhance grazing management opportunities and plant community health on working grasslands
- » Cost-shared practices include:
  - Perimeter and cross fence
  - Woven-wire fence replacement in pronghorn range (wildlife friendly fence design)
  - Water development - stock tanks, pipeline, rural water hook-ups, wells, solar pump units
  - Multi-purpose stock/wildlife impoundments
  - Wetland restorations
  - Grassland establishment
  - Riparian pastures
  - Habitat exclusion fencing

### RIPARIAN HABITAT ENHANCEMENT PROGRAM

- » One-time rental payment of 75 percent per year of the county NASS rate for pasture (10-year contract).
- » Cost share livestock exclusion and alternative water sources.
- » Minimum width 35 feet and maximum width of 240 feet.

## CONTACT A GFP PRIVATE LANDS HABITAT BIOLOGIST

### ABERDEEN

Tom Mitzel | 605.626.3341

### BELLE FOURCHE

Michael Peyton | 605.391.1575

### BROOKINGS

Will Gallman | 704.689.9091

### CHAMBERLAIN

Jessica Thiry | 605.682.8476

### CUSTER

Tom Miklos | 605.416.4080

### FORT PIERRE

John Mayrose | 605.222.0867

### HOT SPRINGS

Ben Pucket | 605.786.8144

### MITCHELL

Alex Elias | 605.350.1725

### MOBRIDGE

Kody Conlon | 605.848.0980

### TYNDALL

Todd Crownover | 605.464.0647

### WATERTOWN

Dan Nelson | 605.303.4805

### WEBSTER

Calvin Meyer | 605.265.3510



Learn more: [habitat.sd.gov](http://habitat.sd.gov)



# PRIVATE LAND HUNTING ACCESS PROGRAMS

## WALK-IN AREA PROGRAM (WIA)

Leases hunting rights on private land for unlimited public foot traffic hunting. Annual payments range from less than a \$1 to \$13/acre depending on size, location in the state, habitat condition, and hunting opportunities. Multi-year contracts are eligible for signing bonuses if they provide priority big game hunting opportunity or access to habitat that isn't hayed or grazed in most years. Signing bonuses are up to \$5 or \$10 per acre per year the land is enrolled depending on your location.

## CONTROLLED HUNTING ACCESS PROGRAM (CHAP)

Leases public hunting rights on private land according to the limits the landowners sets. Limits may include the number of hunters per day, the type of game that can be hunted, the type of take (ex. Archery only), and the dates that it is open to hunting. Landowners manage hunter access via direct contact, self-service check-in box, or through an on-line reservation system on the GFP website. Annual payment is equal to a base payment of \$500 plus \$20/hunter that hunts the property. Multi-year contracts are eligible for a signing bonus based on the hunting opportunity that is provided. New contracts are eligible for \$1,000/year signing bonus for up to a 5 year contract.

## CO-OP WIA HUNTING ACCESS

Leases same hunting rights as a Walk-in Area, but also allows hunters to drive on harvested cropland to place and retrieve waterfowl decoys and allows disabled hunter permit holders to drive on harvested cropland and hunt from their vehicle. No hunting is allowed while farm machinery is working in the field. Annual payments range from \$1.25 to \$3/acre depending on if driving is restricted to ATV/UTVs and the amount of habitat that isn't hayed or grazed in most years. Multi-year contracts are eligible for a signing bonus of half the annual payment times the number of years in the contract.

*State statutes (SDCL 20-9-12 through SDCL 20-9-18) protect landowners who enroll in these programs from certain liability.*



**Find contact information for your local Private Lands Habitat Biologist on page 14 to learn more about these programs.**

# Landowner Advisors: Don't Forget Your Private Lands Biologist

ERIC MAGEDANZ | SENIOR PRIVATE LANDS HABITAT BIOLOGIST

As a landowner, the litany of advisors to keep your operation running smoothly is a long one, especially if you are a landowner. There's your agronomist, financial advisor, crop insurance agent, veterinarian, plenty of seed and chemical dealers, equipment technicians, marketing advisor, and the list goes on. All these folks, plus more, are an integral and necessary part of an agricultural operation to ensure profitability, sustainability, and to make sure landowners are up to speed with the latest information.

An advisor that sometimes makes this list and other times can be overlooked is a natural resource advisor. These folks are specifically trained to gather information from landowners, design projects, inform landowners of any federal, state, and local programs available, and locate associated financial assistance. One of Game, Fish, and Parks' (GFP) top priorities is working directly with landowners to develop projects that support both the landowners' goals while simultaneously benefitting wildlife, soil health, and water quality. GFP Private Lands Habitat Biologists prioritize meeting directly with the landowner, developing a relationship, and getting to know their property. This relationship enables biologists to effectively inform the landowner of available program options that would fit the operation because of their personal connection with the landowner and knowledge of the operation. Biologists are closely tied in and communicate daily with many of our partner counterparts working for other agencies and organizations such as USDA's Farm Service Agency (FSA) and the Natural Resources Conservation Service (NRCS), US Fish and Wildlife Service and numerous non-profit organizations. These relationships are imperative for all to exchange information regarding program options and allow for biologists to

seamlessly share information back to landowners and connect landowners with the appropriate organization or agency representative. There are instances where landowners either are not interested in enrolling in a program or simply don't meet available program criteria. Our biologists still hold these relationships to the highest standard and will meet onsite and provide technical advice to landowners interested in enhancing what they currently have, whether it be for wildlife or working livestock or grain operations.

Reach out to a private lands habitat biologist and add them to your list of valuable resources to improve the bottom line of your operation, meet your goals, and/or improve your land for wildlife. To find a private lands habitat biologist, visit [habitat.sd.gov](https://www.habitat.sd.gov), or locate yours in this or other editions of *Landowners Matter*.

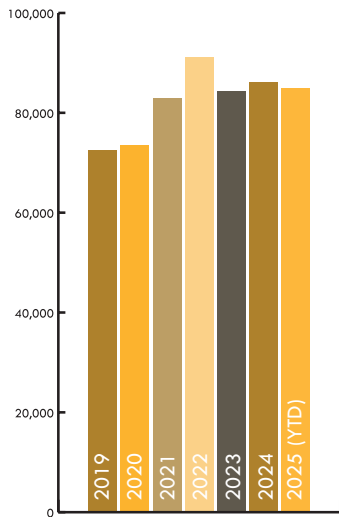


# More About the Private Lands Habitat Programs

Game, Fish and Parks (GFP) continues to offer a robust suite of private lands habitat programs to assist landowners with many types of habitat projects on private lands. In 2024, GFP had over 1,000 habitat project contracts with private landowners. These contracts impacted approximately 90,000 acres across South Dakota. GFP is committed to supporting landowners in their efforts to create and manage habitat. While habitat is GFP's focus, for those working lands and ranches, GFP understands that profitability is an extremely important component to keep those farms and ranches operating on the land. We strive to find ways to work collaboratively where outcomes have mutual benefits. We sincerely thank all of those landowners and producers we have worked with in the past and look forward to working with those in the future.

2024 PRIVATE LAND HABITAT PROGRAM ACCOMPLISHMENTS	
Food Habitat Plots	11,372
Woody Cover	165 Acres
Habitat Protection Fence	36 Acres
Grassland Enhancement	37,571 Acres
Grassland Restoration	845 Acres
Wetland Enhancements	42 Acres
Wildlife Friendly Fence	61 Miles

2019-2025 TOTAL ACRES



# Potential Impacts of Zebra Mussels to Infrastructure

JAKE DAVIS | GAME, FISH AND PARKS

ALAN WITTMUSS | AG AND NATURAL RESOURCES

As Aquatic Invasive Species (AIS) have continued to be introduced and spread across North America, their impacts have been felt by many surface water users. One AIS that has grabbed a lot of attention is the zebra mussel. Initial concerns over this invasive mollusk were that sport fisheries would suffer once established in South Dakota waterbodies. However, a decade later, no noticeable declines in fish populations can be attributed to the presence of these invaders. While that's good news for anglers, negative impacts to recreation and other surface water users have been observed.

One of the primary reasons zebra mussels are different than any native mussels in South Dakota is their ability to attach to hard objects using special fibers, called byssal threads. They are also very good at reproducing, which is one of the reasons they can reach such high population numbers. A single female can produce up to 1 million eggs a year and once fertilized, they float in the water until they reach a point in their maturity where they settle out, attach and grow into adults. In waterbodies that have submerged pumps or that pull surface water, this can cause problems as zebra mussels can either settle onto the infrastructure in the water or get sucked into a system when they are free floating juveniles, called veligers. Once this happens, they may settle out inside the system, where they then grow into adults. Issues often arise when colonization occurs on water intakes or within turbines, strainers and pipes. Usually, preventative measures are required to avoid costly repairs.

When it comes to preventative measures, numerous options exist, and the type of system may dictate what is most appropriate. Simple fixes can include filters and screens that are aimed at keeping adult mussels out of lines. If mussels become established within a system, then other options may include flushing, dewatering or mechanical removal to clear lines and pipes. Additionally, acid injection or chemical oxidants may be used to control mussels in distribution pipes and water intakes. These types of chemical applications require coverage under a Surface Water Discharge Permit. Coverage under the Invasive Animal Pesticide General Permit can be obtained from the Department of Agriculture and Natural Resources Water Quality Program general permitting team.

For more information, please contact your local Game, Fish and Parks Area Fisheries Supervisor or Aquatic Habitat and Access Biologist ([gfp.sd.gov/contactus/](http://gfp.sd.gov/contactus/)) or the Department of Agriculture and Natural Resources ([danr.sd.gov/ContactUs/](http://danr.sd.gov/ContactUs/)).

# SOUTH DAKOTA RIPARIAN BUFFER INITIATIVE (RBI)

TANNER CLAUSEN | AG AND NATURAL RESOURCES (DANR)

The Department of Agriculture and Natural Resources' (DANR) Riparian Buffer Initiative is working to improve water quality through increased use of riparian buffers and animal waste management systems (AWMS) on impaired waterbodies across South Dakota. Riparian buffers, vegetated areas adjacent to streams and lakes, are an effective conservation practice filtering out pollutants and capturing nutrients before they enter waterbodies.

Producers who enroll in RBI will receive a direct payment of 250% of the county National Agricultural Statistics Service (NASS) rental rate to install and maintain buffers on eligible lands. Buffers must be a minimum of 50 feet wide and have a maximum average width of 120 feet, may not be harvested or mowed between May 1 and August 1, may not be grazed between May 1 and September 30, and must maintain a minimum of four inches of cover. In addition, DANR is partnering with the South Dakota Game Fish and Parks to add an extra incentive for riparian buffers in areas participating in Conservation Reserve Program (CRP) and Conservation Reserve Enhancement Program (CREP) contracts. The RBI payment on eligible acres will be 120% of the federal weighted average soil rental rate. Cost-share for practices installed on all RBI buffers will be 75% for installing alternative livestock water, 100% of fencing material excluding cattle from enrolled pasture, and 100% for grass seed.

The AWMS program offers cost share for the construction of AWMS to help small and medium sized animal feeding operations (AFO) effectively manage wastes. All systems that receive funds must be built to Natural Resources Conservation Service (NRCS) specifications and have a comprehensive nutrient management plan developed. Priority will be given to AFOs within one mile or less of a qualifying stream or lake; however, facilities outside of one mile may be considered for funding. Producers must work with NRCS for construction and design of AWMS. RBI payments will be based on current carrying capacity with a payment of \$250 per animal unit up to \$250,000 per system. Cost share is available for expenses associated with feedlot relocation and reclamation if a producer is required to relocate a facility to improve water quality.



*April, 2024*



*July, 2025*

If you would like more information about the South Dakota Riparian Buffer Initiative, please visit:

[danr.sd.gov/Conservation/WatershedProtection/RiparianBuffer.aspx](https://danr.sd.gov/Conservation/WatershedProtection/RiparianBuffer.aspx)

# — PROJECT HIGHLIGHTS

## Planting for the Future: How SD Game Fish & Parks Helps Landowners Grow Habitat

**DAN STERNHAGEN** | REGIONAL TERRESTRIAL RESOURCE SUPERVISOR

The South Dakota Game, Fish & Parks (GFP) offers a range of programs to help landowners enhance wildlife habitat on their property. These programs provide both technical guidance and financial support for establishing food plots, pollinator habitat, grasslands, wetlands, riparian buffers, and woody plantings like shelterbelts and riparian shrub clumps.

Across the state, 12 Private Lands Habitat Biologists (PLHB) work directly with landowners to plan and implement these projects. PLHB Dan Nelson, based in Watertown, recently helped design a riparian shrub clump planting for Lance Mennenga.

a Hamlin County landowner and father of three young hunters stated, “I was blown away by Nelson’s knowledge. He identified native species right on the spot.”

“The Woody Habitat Program and GFP’s help made it incredibly easy, Lance added. I hardly had to lift a finger”.

Together, they selected a drainage area not suitable for farming as the ideal site—an area Nelson noted would make a perfect travel corridor for deer and pheasants.

Thanks to partnerships, landowners like Lance are not just building habitat—they’re building the future of South Dakota’s great outdoor heritage.

## Controlling Woody Species in Working Grasslands

**ALEX ELIAS** | PRIVATE LANDS HABITAT BIOLOGIST

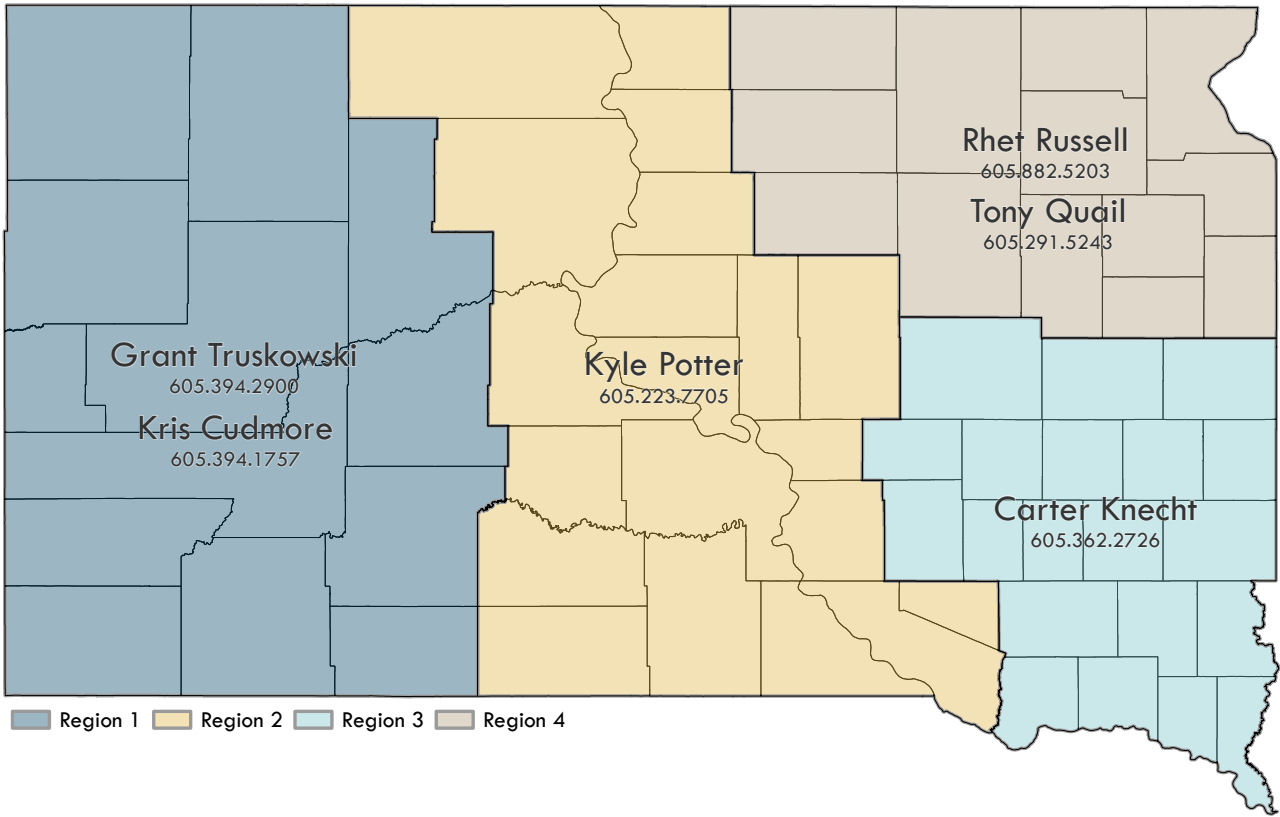
Cedar trees are often planted to provide winter habitat for the wildlife in South Dakota. These trees are beneficial by blocking the winter elements such as snow and wind. At the same time, they can invade grasslands typically used by grazing and grassland animals, diminishing their use by those animals. The trees tend to form thick stands that reduce overall grass production. On grazing pastures this reduces the amount of grass available to livestock. GFP has a program to help producers contain cedars encroachment and keep the trees where they were intended to be. Private Lands Habitat Biologist Alex Elias recently helped a landowner with a cedar tree encroachment problem on his pasture. The landowner cut down almost all the cedars in a 420-acre pasture with financial assistance from GFP. While cutting the cedars, the landowner discovered a prairie

chicken lek on his property, one that has never been found before! There aren’t many prairie chickens on the east side of the state. By helping control the encroachment by cedars, together GFP and the landowner insured that this grassland will not only be productive for cattle but also the wildlife that call it home.

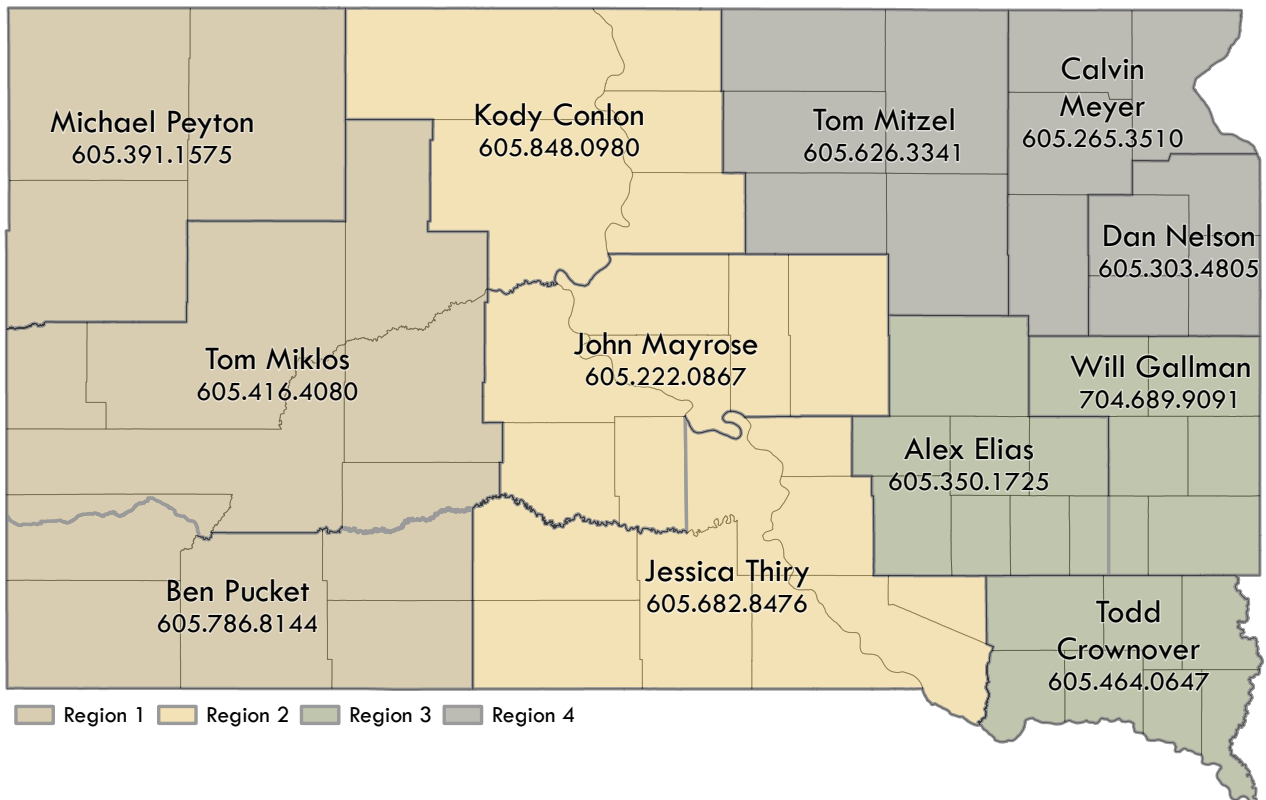




# Aquatic Habitat and Access Biologists

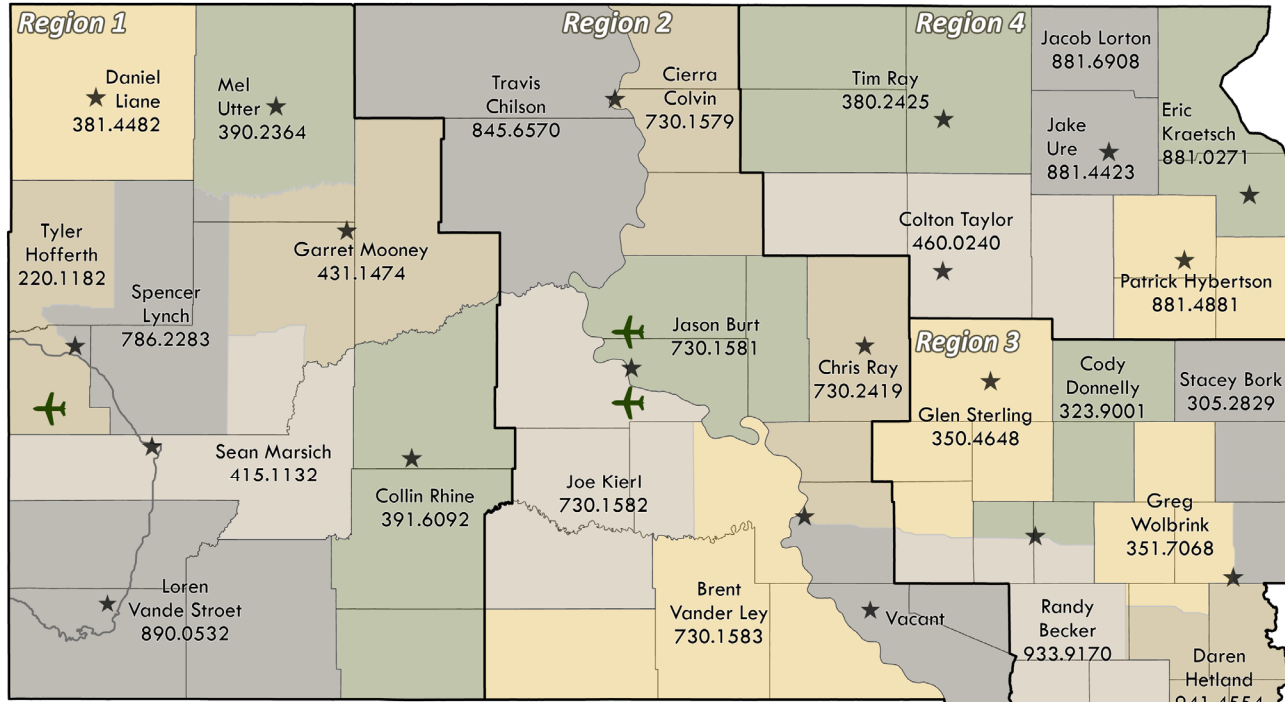


# Private Lands Habitat and Access Biologists





# Wildlife Damage Specialists



- Regional Program Managers**
- 1 - Vacant
  - 2 - Tyler Bartels, 402.921.0948
  - 3 - Brad Baumgartner, 605.941.1578
  - 4 - Nick Rossman, 605.881.8404

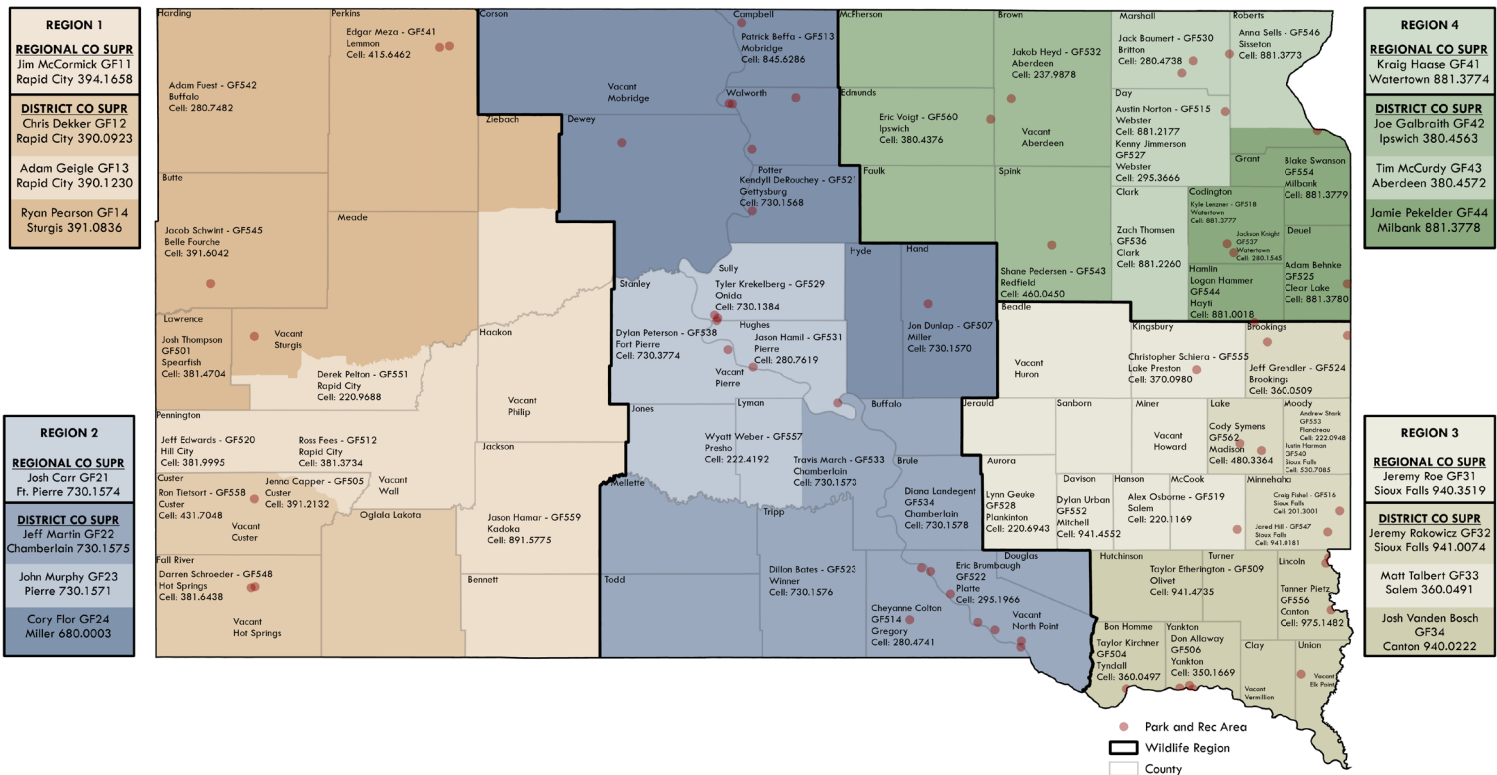
- Regional Terrestrial Resource Supervisors**
- 1 - Trenton Haffley, 320.224.3572
  - 2 - Nathan Baker, 605.280.1468
  - 3 - Julie Lindstrom, 605.214.1779
  - 4 - Dan Sternhagen, 605.695.3718

- Regional Supervisors**
- 1 - Mike Klosowski, 605.880.1175
  - 2 - Mark Ohm, 605.680.4389
  - 3 - Kip Rounds, 605.222.5503
  - 4 - Jacquie Ermer, 605.265.0140

- ★ WDS duty station location
- ✈ USDA-Wildlife Service Plane Location
- Houndsman & Black Hills Wildlife Damage Specialist  
Chad Sebade, 605.381.9996



## SOUTH DAKOTA GAME, FISH & PARKS LAW ENFORCEMENT



# LANDOWNERS MATTER

GAME, FISH AND PARKS | 523 EAST CAPITOL AVE | PIERRE, SD 57501



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PLEASE EMAIL [ALLIE.ELLINGSON@STATE.SD.US](mailto:ALLIE.ELLINGSON@STATE.SD.US)

*South Dakota Game, Fish and Parks serves and connects people and families to the outdoors  
through effective management of our state's parks, fisheries, and wildlife resources.*

## THANK YOU, LANDOWNERS!

Thanks to your dedication to conservation, hunters harvested  
over 1.3 million roosters in 2024.

