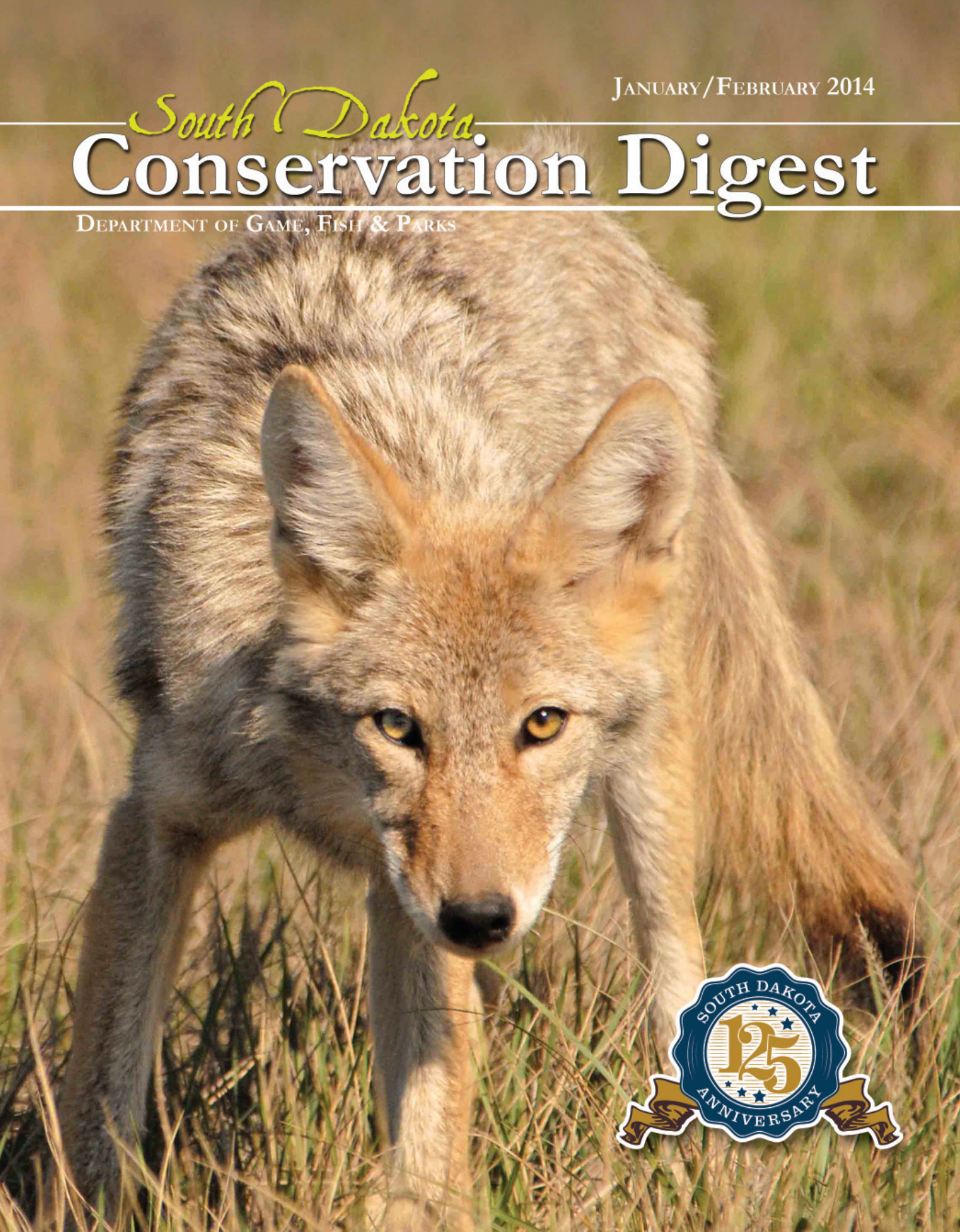
January/February 2014

South Dakota Conservation Digest

Department of Game, Fish & Parks



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South Dakota Conservation Digest

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Front Cover: Photo © Chad Coppess | SD Tourism | travelsd.com
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Back Cover: Photo © SD GF&P

Governor's Pheasant Habitat Summit

Discussions of pheasants, habitat and economics, lead to ideas and a work group.

For the millions of Americans who hunt, mention South Dakota and the word 'pheasant' would be immediately on their lips.

The pheasant is king here. We know that. For over 10 years our state has been "the good old days" for ringneck hunters. All time high populations, easy limits and happy hunters have been the norm.

But the storm clouds have been brewing. Loss of CRP and other prime habitat, combined with a tough winter and a brutal spring has put a damper on our 'good old days'. Instead of stories of awesome hunts, talk at the café has turned to "What are we going do to get our pheasant hunting back?"

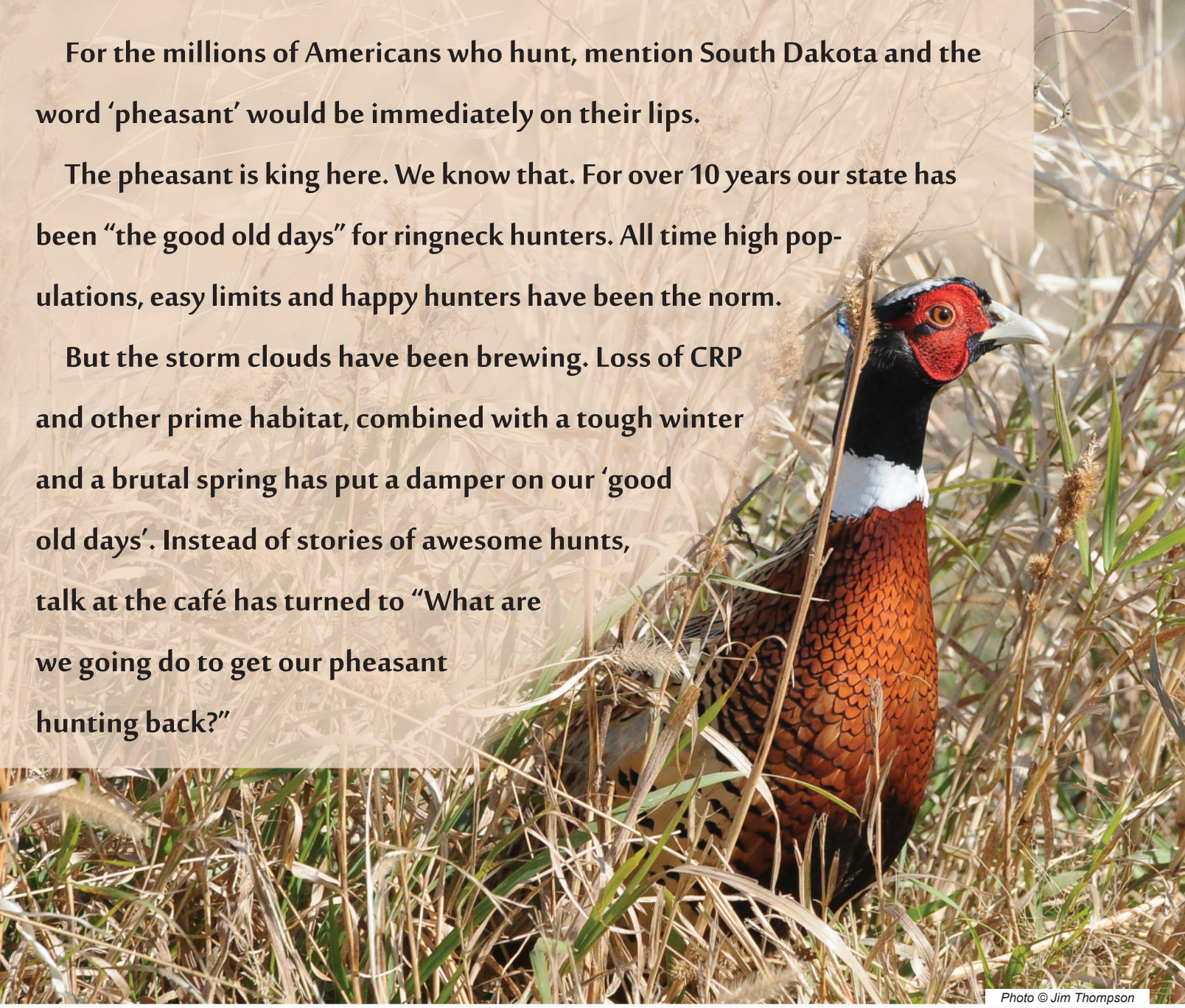


Photo © Jim Thompson

To help gather answers to that question, Governor Dennis Daugaard pitched the idea of having a "Pheasant Habitat Summit". His idea was to gather hunters, landowners and other invested people to sit down and brainstorm ideas for preserving the habitat that we currently have and to increase the amount of quality habitat in the state.

"Everyone has ideas and opinions," Game, Fish and Parks Chief of Terrestrial Services Tom Kirschenmenn, said. "From pen raised birds to predator control, the ideas are endless. What we do know, however, is that more quality habitat equals better pheasant numbers."

With that idea in mind, South Dakota Gov. Dennis Daugaard held the first ever, "Pheasant Habitat Summit" in a town that considers itself pheasant central, Huron, in December 2013.

The Summit was open to the public and registration was free. In addition, to those interested parties who were unable to make the Summit in person South Dakota Public Broadcasting produced a live webcast of the event. SDPB also recorded the event and it is available on their website as well as the GFP website.

Nearly 400 people braved the brutal cold to hear Gov. Daugaard start the Summit with these remarks; "Pheasant hunting is our proudest tradition and South Dakota has long been the envy of the pheasant hunting world. The purpose of this Summit is to bring together stakeholders with different interests to talk about what's happening right now and to see where our state should be headed in regards to pheasant habitat."

The morning session was filled with speakers.

SD GFP Wildlife Director, Tony Leif, gave a presentation on the history of the Ringnecked pheasant in South Dakota.

Barry Dunn, Ph. D. - South Dakota Corn Utilization Council Endowed Dean, SDSU College of Agriculture and Biological Sciences, gave a presentation on South Dakota's land use.

Bruce Knight - Principle and Founder, Strategic Conservation Solutions, LLC presented information on modern agriculture production.

Dave Nomsen - VP of Governmental Affairs, Pheasants Forever, discussed conservation policies and Jim Hagen, SD Tourism Secretary, discussed pheasant hunting and tourism.

Photo © Adam Oswald | SD GF&P

Preserving nesting habitat is essential to all wildlife in South Dakota.

After the presentations, participants grabbed a quick sack lunch and went off to find their pre-assigned groups for the afternoon brainstorming sessions. Twenty rooms were set up to allow small groups to gather and come up with ideas.

"There was a lot of discussion regarding how we wanted the Summit to be organized," said Leif. "We felt that the most important factor was to allow attendees the opportunity to voice their ideas regarding habitat. I think the small group sessions allowed people to feel comfortable in sharing their thoughts."

Every idea was recorded, and at the end of the one hour and 45 minute session, groups were asked to pick their top two or three ideas to be shared with the entire Summit.

GFP Secretary, Jeff Vonk, presented the list of top ideas to the group. "This doesn't capture the full list of all of the ideas available. All of the ideas that were captured will be available through our website," Vonk said.

The list will be the basis of a pheasant working group that Gov. Daugaard announced the creation of at the end of the Summit. "The important thing now is to coordinate and communicate. We want to continue to engage you and as we move ahead with these ideas. I will be forming a work group to take these ideas and try to come up with a plan of attack. We will continue to communicate what we are trying to do."

To find out more about the Governor's Pheasant Summit, to watch any of the presentations, to see the complete list of ideas that was generated from the small group session or to comment or give ideas, please visit:

www.gfp.sd.gov/pheasantsummit

Tony Leif, Director of the Game, Fish and Parks Division of Wildlife, gives a presentation on the history of the ringnecked pheasant in S.D. Nearly 400 attendees were on hand to participate in the Governor's Habitat Summit, and approximately 1,000 watched the summit live online.

Photo © Jim Thompson

PHEASANT HABITAT WORK GROUP MEMBERS

On January 7th, Governor Dennis Daugaard announced the members of the work group tasked with examining strategies for developing pheasant habitat in South Dakota.

The thirteen pheasant habitat work group members are:

- Pam Roberts, Pierre (Chair) - retired Secretary of SD Dept. of Labor and Regulation
- Barry Dunn, Brookings - dean, College of Agriculture and Biological Sciences at South Dakota State University
- Tim Kessler, Aberdeen - Pheasants Forever Board of Directors, former Game, Fish and Parks (GFP) Commission chair
- Mary Duvall, Pierre - District 24 state representative
- Jason Frerichs, Wilmot - farmer, Senate Minority Leader, District 1 state senator
- John Cooper, Pierre - GFP commissioner, former GFP Secretary
- Steve Halverson, Kennebec - farmer, owner of Halverson Hunts
- Jan Nicolay, Chester - former state representative, conservation advocate
- Jeff Zimprich, Huron - USDA-NRCS state director
- Doug Deiter, Faulkton - farmer
- Jeff Vonk, Pierre - GFP Secretary
- Lucas Lentsch, Pierre - SD Secretary of Agriculture
- Nathan Sanderson, Pierre - Governor's policy advisor for agriculture and GFP

The work group will meet periodically through June, with a final report completed in late summer 2014.

GOVERNOR'S PHEASANT HABITAT SUMMIT RESOURCES

www.gfp.sd.us/pheasantsummit

View ideas formed during the break out group sessions. A 19 page .pdf document lists all ideas brought forth during the summit can be viewed online.

Summit Videos

Not able to attend or watch during the live online stream? Videos of the speakers' presentations during the morning session can be viewed online.

Comment

Present your comments, ideas, and/or suggestions related to pheasant habitat in South Dakota! Email: pheasanthabitat@state.sd.us, or by telephone at 605-223-7660. All submissions will be considered by the work group.

SONG DOGS

Photo © Dean Pearson | deanpearson.net

By Chris Hull - GF&P Communication Specialist

As the sun broke over the Missouri River breaks along Lake Oahe, I was cold. My breath had created a crusty, frozen bridge over my facemask and my feet were already freezing.

"Why am I out here?" I thought to myself. "I could be sitting in a warm fish house, listening to the radio and catching fish. Instead, I'm out here freezing for a coyote." Those thoughts begrudgingly crawled through my brain like my daughter getting out of bed on a school day as the sun grew higher.

I'm not a predator hunter. With a rifle, I am an average shot at best and I hate being cold (a funny thing for a guy who loves to ice fish, I know). I also hate sitting still in the outdoors. I want to know what's over the next hill, what's biting off the next point, or what's sitting in that next slough.

But I also like to try new things, and predator hunting is one of the fastest growing outdoor sports. So there I was, hiding behind a yucca plant. I released a few squeals from my new injured rabbit call. It sounded terrible, absolutely terrible. It sounded exactly like what it was – a frozen neophyte squealing through a $15 call.

I had just convinced myself that this was pointless, that the day wasn't a waste, and there was still time to grab my fishing gear and hit the ice, when I caught movement off in the distance. My binoculars were frosted up, but I quickly cleared them and caught a solitary coyote slipping into the drainage below me, a quarter mile away. A minute later, there he was, 200 yards away. He had stopped and was looking right at me. He had busted me and I was sure he was going to bolt.

I found him in my crosshairs, released the safety and squeezed the trigger. The last I saw of that coyote was him bolting over the hill where my bullet now resided.

I told you I am not very good with my rifle. I trudged back to my pickup, put my rifle away and did, indeed, get my ice fishing gear; I vowed to give coyote hunting another try.

Trying new outdoor pursuits isn't hard, swallowing your pride is usually the toughest part. You don't want to make a giant faux pas and look dumb. Not knowing what you are doing in the great outdoors is akin to wearing a new hunting vest with the tag still on it – not something to be ever lived down. Our pride keeps us from trying new things, and I wanted information, so I went to the best I source I knew.

Jeff Rheborg is a Fort Pierre "kid." He grew up on the Stanley County river breaks, and he knows his coyotes. In fact, you could say Jeff makes his living off of them. Jeff heads up the Varmint Hunt-

ers of America (www.varminthunter.org), one of the leading organizations and magazines in the U.S. dedicated to predator and varmint hunting.

Rheborg and his hunting partner also recently won the National Coyote Calling Competition in Rawlings Wyoming – pretty much the Super Bowl for coyote hunters.

I retold my try for a 'yote to Jeff and asked him what I had done wrong.

"You missed," he laughed. "If you got him to within 200 yards, you did well. You just missed."

While I didn't feel any better about my rifle shooting prowess, I did feel a little more confident about trying to get a "song dog" on my own again. For the next hour, I picked Rheborg's brain for sort of a "Coyote Hunting 101 and 202" primer.

"One of the great things about predator hunting is the lack of equipment you need to get started," Rheborg told me. "You got the right start. Shoot your deer rifle. You are comfortable and relatively confident in it. That and a rabbit in distress call will take you a long way."

Most serious predator hunters will shoot a smaller caliber, flatter shooting rifle, such as a .22-250 or a .223. Rheborg has a custom built, Ackley 6mm with a NightForce scope mounted on it. He is confident in shooting over 600 yards, but then again, he spends a lot of time chasing coyotes.

"Shoot what you know," Jeff said. "I can't stress that enough."

My choice of call was correct as well. "Most coyotes, across the country will fall for a rabbit in distress call," Rheborg said. "The advance of electronic calls has helped predator hunters tremendously, but a distressed rabbit call should be in every beginning hunter's pocket."

Everyone thinks of coyote hunting as a winter sport, but truth be told, they are easier to hunt in the spring or summer," Rheborg said. "Winter coyote pelts can be worth some money, while other times of year the pelts aren't worth much, but spring and summer hunts, using a howl or a call mimicking a hurt pup can be really effective."

Add to your gun/scope combination and a mouth call, a pair of binoculars and a range finder, and Rheborg said you are ready to go.

"The advance of electronic calls has helped predator hunters tremendously, but a distressed rabbit call should be in every beginning hunter's pocket."

Photo © Chad Coppess | TravelSD.com

On the topic of camouflage, Rheborg is adamant. "You need good camo, or a white snowsuit if there is snow, but more than anything, you have to sit still," he said. "You can have the best ghili suit in the world, but if that coyote catches you moving, he'll bust you."

As far as the hunt is concerned, "Setup is ninety percent of the game, having coyotes in the area is the other ten percent," Rheborg told me as we switched gears. "Do your homework. Scout. If you see or hear coyotes in an area, hunt that area."

The best time to call coyotes is at daybreak or sunset, but coyotes can be tak-

Jeff Rheborg takes his varmint hunting seriously and uses more sofisticated equipment, but he advises that novice coyote hunters use what they already have and know how to use.

en anytime of the day. Setting up with the sun at your back and the wind in your face is imperative. Rheborg likes to park his vehicle out of site and walk a little ways before beginning to call. Once he begins calling, he will wait 15 to 20 minutes before packing up and hitting another area.

"There are lots of coyotes on public land, and for those situations, I will wait longer," he said.

And just because you killed a coyote in an area, don't be in such a hurry to pick it up and leave.

"Many times, after you have shot one, there might be one or two more coming. Be patient,"Rheborg said.

Coyotes are very adaptable critters and can live just about anywhere. Hunters might find private land access much easier than a fall pheasant hunt.

"Most farmers and ranchers don't want coyotes around," Rheborg said. "Stopping and talking to landowners, making that connection and showing some interest in trying to take care of a few of their problem 'yotes has gotten me on some pretty great land."

The allure of hunting such a smart and wary critter is one of the reasons Rheborg is hooked on coyote hunting.

"You are matching wits with an apex prairie predator," he said. "They are can be cautious and sneaky, but if you do everything right and get them to drop their guard, that is a big rush."

Social media and internet forums have played a large part in coyote hunting growth as well.

"Guys can use the VHA website forum or other forums to discuss new products, talk about what calls to use and when and where to find good fur buyers for their pelts. I think people are more likely to ask 'beginner-type' questions on an internet forum and that leads to more participation."

Just like any school, an introductory course can only take you so far.

"State GFP trapper Randy Rhoede told me a long time ago, 'There is no big secret to coyote hunting. You have to watch, learn and do it.' It's like any other outdoor activity. Go out, pay attention, and you will gain experience and have more success. It's a fun and relatively inexpensive hobby. You don't need a ton of new equipment, and there isn't a county in the state that doesn't have coyotes."

Sounds like good enough reasons to me. I hope the next coyotes like the song I'll be singing.

Surviving a Prairie Winter... UNDER WATER

By Geno Adams, SD GF&P Fisheries Program Administrator

As you are likely aware, South Dakota can be a tough place to reside during the winter months. With the stiff prairie winds and Artic like air temperatures that make an appearance every winter, heading south seems to be a pretty good option come February. Many birds have adopted this strategy for dealing with the winter blues in the upper Midwest. Each fall, waterfowl migrations pull sportsmen and women away from watching their favorite college football teams in hope of bagging a blue-winged teal or a nice plump mallard before they make it to their wintering grounds.

Fish species in South Dakota don't have that luxury. Constrained by the banks between which they reside, fish like walleye, smallmouth bass and catfish have to utilize somewhat different strategies when it comes to winter survival.

Without the ability to migrate away from the harsh winter, fish must adapt to rapidly changing conditions once fall yields to winter. The water where they live will cool down to an icy 32 degrees near the surface where ice forms. Deeper waters will be warmer but still below 40 degrees during winter months.

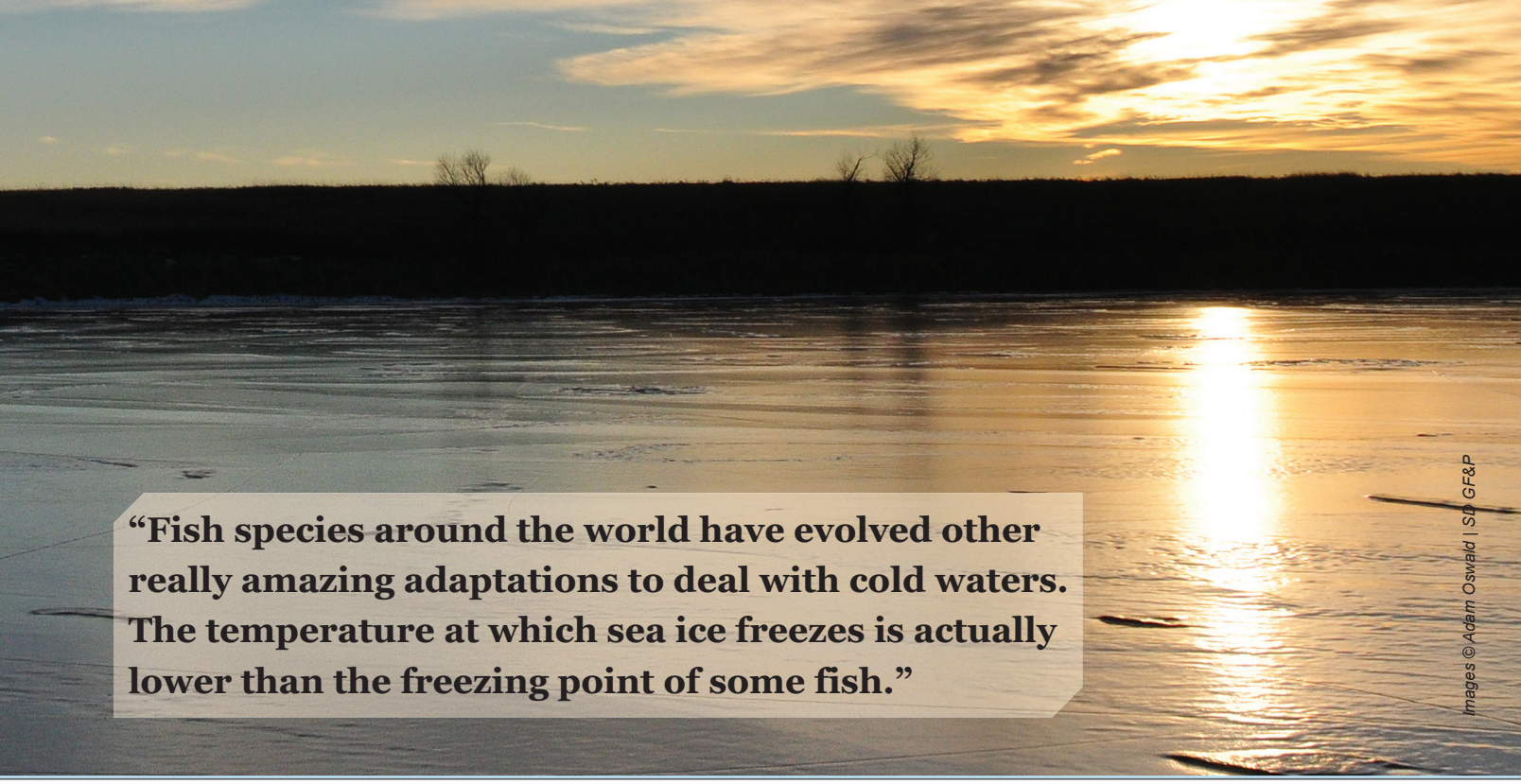
So what's a fish to do? The first strategy for winter survival is to seek out the warmest water possible. Often in the winter, the majority of fish, dependent upon species, in a South Dakota lake will relocate themselves to deeper water than you will find them in during warmer months. Deep water isn't the only warmer refuge for fish though.

Warm water springs are present throughout much of South Dakota. The large reservoirs of the Missouri River, Oahe, Sharpe, Francis Case and Lewis and Clark, swallowed up many of these springs as they filled to capacity upon closure of the dams.

These springs have likely allowed gizzard shad to remain inhabitants in much of the Missouri River in South Dakota. Generally associated with warmer climates, gizzard shad are on the northern edge of their range this far north. Shad have become one of the most important food items for many sport fish in Lakes Sharpe and Francis Case.

It is thought that shad have been able to maintain their existence in the frigid waters of the reservoirs by seeking these warm water springs as refuges in the wintertime. Most of the gizzard shad die each winter, but the springs allow enough adults to overwinter that they can reproduce and populate Sharpe and Francis Case with plenty of gizzard shad for the hungry mouths that await them each summer. Even for those fish that find somewhere warmer to hang out under the ice, everything slows down with the cold water. Activity levels drop. Feeding rates drop. Some fish reach a "hibernation" like state at times during the winter.

On an ice fishing trip to the Cheyenne River arm of Lake Oahe, I had the chance to see this in action one cold January day a few years back. After drilling numerous holes in early afternoon, I found my choice spot for the evening bite. Armed with an underwater camera, I dropped the fish shaped apparatus down the hole to see what was lurking in the frigid waters of Lake Oahe. Giving the camera cord a spin revealed a nice sized channel catfish lying directly on the bottom beneath my shack. The only indication that the fish was still alive was the slow pulsing of its gills in and out. Determined to catch that particular fish, I



"Fish species around the world have evolved other really amazing adaptations to deal with cold waters. The temperature at which sea ice freezes is actually lower than the freezing point of some fish."

Images © Adam Oswald | SD GF&P

dropped numerous baits down trying to get it to bite. Each presentation sat within a foot or two of its face. I finally gave up and focused on the task at hand, catching walleyes. For the next four hours, I sat in my shack reeling up a walleye every now and again, mixed with a few catfish. I would check on that bottom dwelling catfish every so often. It never moved. Not an inch. Looking extremely healthy and continuing the flow of fresh water over its gills, that catfish appeared to be in the previously mentioned hibernation-like state that occurs with some fish during cold water periods. Even a tasty minnow under a bobber dangling in its face for hours could not snap that catfish out of its winter slumber.

Fish species around the world have evolved other really amazing adaptations to deal with cold waters. The temperature at which sea ice freezes is actually lower than the freezing point of some fish. Antarctic fish accumulate various compounds that can lower the freezing point of their bodies. Other species have a compound known as glycoproteins that can act as anti-freeze. The blood of some Antarctic fish also differs in that it lacks the red colored pigment or hemoglobin that is responsible for carrying oxygen throughout their bodies. This makes their blood thinner and allows them to slow down their metabolism and conserve much needed energy.

Fish are amazing creatures that are adapted to aquatic habitats all around the world. South Dakota is a harsh environment complete with bitter cold temperatures, oppressive heat, driving winds and varying precipitation, but as ice anglers and open water anglers around the state already know, scaled critters do just fine making a living on the prairie. Though, I'm guessing that, as with most South Dakotans, the warming sun and rising water temperatures of spring are a welcome treat, even for fish.

SOME THINGS DON'T CHANGE... AND THAT'S GOOD

By Verlyn Hofer for the Lennox Independent.

Verlyn is the father to GFP Parks Director Doug Hofer and, according to Doug, has not missed a pheasant season since tagging along with his dad in the 1930's. Whatever your success in this past pheasant season, we feel Verlyn has captured the true spirit of the hunt.

This old writer can't remember everything that has happened in his life during the past 75 years or more, but selective memory is really good when things happen that remind one of the pleasant and joyful moments of long ago.

So it was this past October when we went along for the ride to observe some members of our extended family participate in that annual ritual of attacking the Ringneck population on the opening day of pheasant season. Along with some out-of-state hunters, this family group views opening day as a national holiday, set aside for camaraderie and the storing up of more wonderful hunting memories shared with friends.

Granted, pheasant numbers were down a bit from recent years, but there was still a good bird population on a farm near Reliance where we have hunted for the past thirty-some years.

Farming operations have changed a great deal since we first hunted the area, and many hunting friends have come and gone during that time, but it's still an enjoyable experience just to be part of the hunt.

A distinct change, of course, is the fact that this old "hunter" can no longer tramp the fields nor fire the old shotgun. That did little to distract from the really great moment of this year's hunt.

Jacob Yeager, age 14, with his first pheasant.

That moment came when we witnessed our oldest great-grandson bag his first pheasant. Oh, what a flood of memories that triggered. Jacob is 14 years old, about the same age we were when we first took to the field with gun in hand. We can't remember the exact place or moment that we bagged our first pheasant about 75 years ago, but we will never forget Jake's big moment.

Perhaps that only two other male members of the clan who were prouder at that moment were grandpa Doug and dad Derrick. All four generations sensed, at that moment, that the bagging of that bird represented something much more important than simply shooting a pheasant.

We all knew that now Jake is addicted to the sport and will help carry on the family legacy of the opening day hunt.

Be assured, Jacob is not the only insurance policy the family has in this regard. His younger brother and two cousins were also along for the ride that day, and they too will learn the art of hunting in due time. And hunting in our family is not confined to the male gender. Two of the gals learned a long time ago that if you can't beat 'em, you join 'em. Carolyn and Michelle bag their share of pheasants and other game.

Among the memories rekindled by Jacob's hunting success was that of hunting with our own grandfather just one time. Our hunts with other members of our family too numerous to count, as are the pleasant memories of those experiences. As we look back, each and every one of those hunting partners (relatives and non-relatives) played a special role in our life, adding to the joy of living in the great outdoors for adventurous moments.

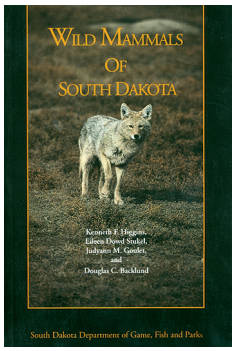
Yes, many things have changed about hunting and in life in general during our rather long journey, but some things remain the same.

Among those is the joy of hunting with family and friends, away from the hassle and demands of our daily routines and responsibilities, if for only a brief time. And that's good, very good.

Thanks, Jacob, for reminding us of this.

PUBLICATIONS AVAILABLE THROUGH THE SOUTH DAKOTA GAME, FISH & PARKS WEBSITE

Wild Mammals of South Dakota

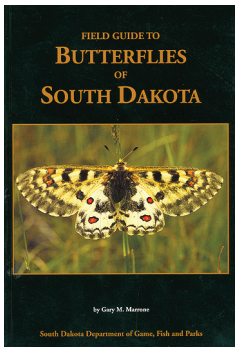


Wild Mammals of South Dakota depicts 95 species of mammals occuring within the state's borders. This reference will serve anyone interested in South Dakota's mammals, from the amateur naturalist to the experienced biologist.

Full color photographs, distribution maps, descriptions as well as habitats and habits for each species!

Published in 2000 **$24.95**

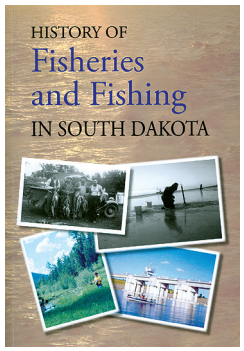
Field Guide to Butterflies of South Dakota



The Field Guide to South Dakota Butterflies is the first comprehensive treatment of South Dakota butterflies. The guide provides an account for each of the 177 species of butterflies known to occur in the state. Details on each species include a description of the adult and caterpillar, as well as information on distribution, habitat, larval host plants, and nectar sources. Maps showing distribution by county for each species is also included. More than 700 color photographs!

Published in 2002 **$39.95**

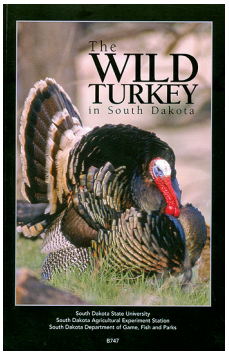
History of Fisheries and Fishing in SD



People have harvested fish in what is now South Dakota for several thousand years. Archaeological evidence at campsite digs confirms that Native American Indians were gathering fish to eat, ornamentation and tools. The over-exploitation of fishery resources began with the arrival of the market hunter, the soldier and the settler. With statehood, South Dakota had the legislative machinery to begin controlling fishing and later, to apply scientific management to fish harvest.

Published in 2007 **$10**

The Wild Turkey in South Dakota

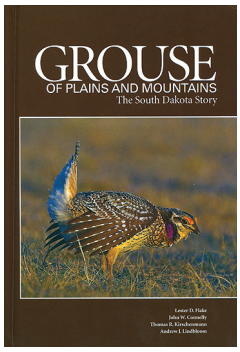


By the 1920s the once abundant eastern wild turkey had been exterminated from South Dakota. Since then, efforts to restore this magnificent bird to its original range have proved successful beyond imagination.

If you enjoy watching, listening to, or hunting wild turkeys, if you host wild turkeys on your land, or if you are a wildlife manager, you will find the historical, behavioral, ecological, and management information in The Wild Turkey in South Dakota a valuable resource.

Published in 2006 **$15**

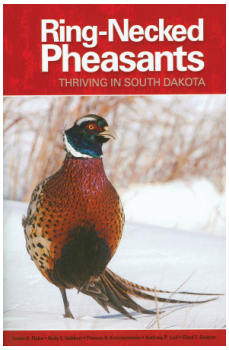
Grouse of the Plains and Mountains The South Dakota Story



Grouse are among the most treasured and beautiful of South Dakota's wildlife species. Our vision in writing this book was to advance the understanding of and appreciation for these unique and striking birds as well as to encourage conservation efforts in South Dakota and other parts of their geographic range. Pictures and text that will keep you interested.

Published in 2010 **$15**

Ring-Necked Pheasants, Thriving in South Dakota



The third and final book of a three book series on game birds in South Dakota. Details on the history of pheasant populations and management back to the early 1900's, as well as information on habitat management, pheasant ecology and biology, reproduction, surveying methods, and hunting are also described. The 254 page book is filled with many photos that readers will find interesting and enlightening.

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When SUMMER Ends

Parks stay busy in the cooler months, too.

By
Connie Goodfellow,
Secretary,
Northeast Region
State Parks,
stationed at
Oakwood Lakes.

Last spring, I celebrated my one-year anniversary as an employee of the South Dakota State Parks. When I tell an old acquaintance or new friend where I work, invariably the question is asked: "Is that a year-round position?" Followed by, "What do you do all winter?" The answer is more complex than you may think.

While the months of April through September are our busiest, the rest of the year keeps us busy, too, preparing for the next camping season and hosting a variety of "shoulder-season" activities.

The summer camping season of 2013 was ideal and campgrounds around the state were full each weekend. South Dakota State Parks encompass a total of 102,142 acres and in 2013 we hosted approximately 7.6 million park visitors. The number of overnight camping units at South Dakota state parks in 2013 totaled 282,000. Those are some large numbers!

But when the summer camping season ends, another season in the parks begins.

Campgrounds in the fall stay fairly busy with hunters and leaf-watchers. At the same time, park staff stays busy repairing, upgrading and improving grounds and facilities following the visitor-heavy summer.

On October 1, the sales of the new Park Entrance Licenses begin. Those who come to the parks to pick up their new licenses are happy to chat and share the experiences they had over the summer. We find many of our customers who purchase their licenses this time of year are excited to give these new licenses as holiday gifts. Through these thoughtful gifts, our generous customers are sharing the opportunity for their family and friends to enjoy our beautiful South Dakota outdoors.

During the winter months, new budgets are developed for legislative approval in the spring. As with any other business, funds are always tight, and each park requests only those items that are absolutely necessary for the operation of each park. Considering the amount of hours each piece of equipment acquires with daily use for park upkeep, such as mowers, trimmers, trailers, and snow removal, updates are necessary and bid requests are sent out in search of the best price available.

New development projects are also considered each winter and if the funding is available, work can begin. Depending on the size of the project - ranging from a new picnic shelter to a new campground site, this can be a lengthy process and require much time and effort from a broad group of workers.

A major job park employees tackle each winter is

to cut firewood from dead and fallen trees. This firewood is cut and wrapped to be sold in bundles to park visitors. In this way, the parks recognize the recycling process. It also provides a much needed service for visitors. Due to diseases and bugs that could be carried in from infected areas, park visitors are asked to not bring firewood in from outside sources. Firewood from the park itself provides the best option for both the visitor and the safety of the trees.

When the snow falls, employees work hard to move snow blocking public roads and water access areas. Modern RVs, camping cabins and lodges have made winter camping more popular, and people have been increasingly recognizing the opportunities for winter recreation.

I will confess that winter is not my favorite season. I love summer – hot, sticky, humid, summer. Yes, even humidity. Campfires, biking, canoeing and everything about summer make me happy to be alive. However, as a mother of three very active boys, I also recognized the necessity of outdoor winter recreation – our go-to activity being ice fishing.

During the winter of 2010, I was pleasantly surprised to find a new winter activity that I not only enjoy, I love: cross country skiing. A friend introduced me to the sport on the trails at Lake Herman State Park and in a short time, I outfitted myself with all the necessary equipment. Cross country skiing is healthy and easy and (once the initial purchase is made) fairly inexpensive. Quite often after a day of work here at Oakwood Lakes State Park, I enjoy unwinding on the solitary and scenic trails around me.

The South Dakota State Parks take pride in our trails. The winter months provide great opportunities for outdoor recreation and exercise. Several parks maintain and groom trails for hiking and skiing. Some parks even have snowshoes you can borrow for free so you can make your own path.

Beyond the usual winter maintainance work being done, the state parks still host a variety of fun events throughout the frigid months.

Ice fishing is a tradition and sport dating back many years. Fishermen from near and far spend hours on the South Dakota ice. When hot spots are found, ice fishing villages develop. The GFP Wildlife Division, along with the Parks and Recreation Division, work together in a combined effort to enforce and maintain these areas.

In December, we start the search for summer employees. In March, park managers begin the interview process. During this time, gate attendants, campground attendants, naturalists, rangers and maintenance crews are considered. When the hiring is complete, paperwork needs to be filled out and submitted. Finally, when everyone is properly trained, we are ready for a new camping season.

Budgets, contracts, invoices, and outdoor chores are just a part of winter activities in the parks. The real fun takes place with the special events.

In October, Halloween and harvest events and hikes are held in all corners of the state. Winter brings Christmas activities, and several parks kick off the new and healthy year with a First Day Hike on Jan. 1. Fishing tournaments, snowshoe hikes, cross country ski events and bird watching are just a few more of types of events you can enjoy this time of year.

It is not only our job, it is our passion to welcome everyone and share what we get to experience every day. That includes during the fall and winter seasons. We invite you to try snowshoeing, cross-country skiing or hiking this winter. Rent a cabin for a cozy winter's stay, or host the whole family at one of the lodges. Summer doesn't mean the end of outdoor recreation; it just puts a new twist on it.

Cross-country skiing is one of the more popular things to do on the Parks and Recreation lands during the winter months.

The Grand Old Flag Returns

By Katie Sorensen
2012 Fort Sisseton Archives and Collections Intern

Home

On June 10, 1889—just months shy of 125 years ago—the last lieutenant and ten soldiers stationed at Fort Sisseton sounded the final retreat. They lowered the American flag that had flown over the military post for years, ritualistically folded it, and stored it away before continuing on their path to new assignments at Fort Snelling, Minn.

The military post had been the center of prairie settlement for 25 years. The troops stationed at Fort Sisseton left behind a record of their struggle for life on the frontier, through the items left in the buildings they abandoned and through the diaries, reports, and letters in which they told their story. The final lowering of the post flag represented the end of an era.

Unfortunately, the flag, an important symbol of Fort Sisseton's history, was lost for decades. After being folded, it was given to Albert Seward Palmerlee, a local man in attendance on the fort's final day. For years Palmerlee kept the flag within his family, passing it down to the next generation. During that time the flag was altered and mended, including the removal of nearly 3 feet of frayed fabric from its 20-foot fly length. After a while, the members of the Palmerlee family were pretty much the only ones who knew of the flag's existence.

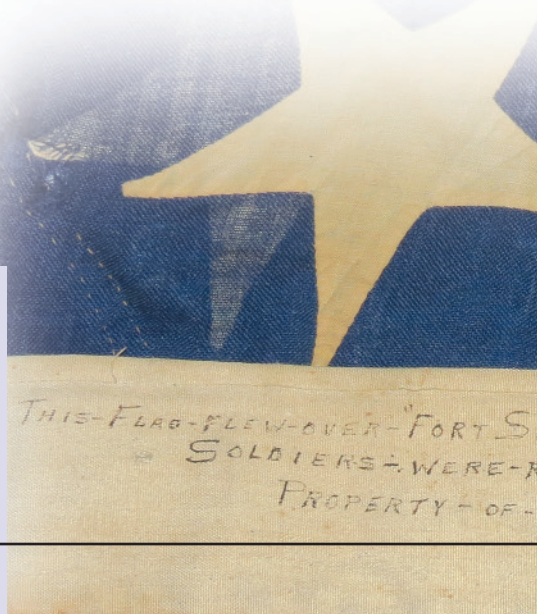
Like the flag, the fort itself slipped from memory. Following the grandeur of army life, the fort continued on as farmland, a private hunting lodge, an Air Corps gunnery range, and a home for transient men serving under the Works Progress Administration.

In 1959, the fort took on new life as a South Dakota state park. When the first visitor center opened in 1968, the Palmerlee family brought the historic flag back home, donating it for display. Park staff draped the flag from a corner of a display case for all to enjoy. Unfortunately, displaying it this way put stress on the fibers, quickly weakening it and forcing it into storage once more. The flag was brought out only occasionally for appearances at special events, such as anniversaries and Fourth of July celebrations. In the mid-1980s, it was even sent to a conservation center in Denver for analysis, but for reasons unknown, the preservation was never begun and the flag was sent to archival storage. There it stayed for many years, all but forgotten.

During the summer of 2012, fort staff and volunteers were reorganizing the archives when they came upon a flat, awkward archival box. The label read "last flag flown over Fort Sisseton." The story of the Palmerlee fam-

After being re-discovered in a small acid free box in storage on the second floor of the Commanding Officer's Quarters, the flag was brought to the attention of Terri Schindel, Conservator who was onsite to teach "Collections Care/Preventive Conservation" with the Dakota Collections Care Initiative, in August, 2012. *Photo Courtesy of Kristen Maycroft*

Due to this very exciting discovery the participants voted to learn about artifact documentation by documenting the flag. The flag was laid out on 10 tables placed side-by-side and examined for structural and visual condition. Following examination, documentation and a treatment proposal was written by Terri Schindel, Conservator with assistance from the participants at the workshop. *Photo Courtesy of Kristen Maycroft*



ily's flag was just a fuzzy memory, and staff were skeptical that this flag was really the one that had been donated four decades before.

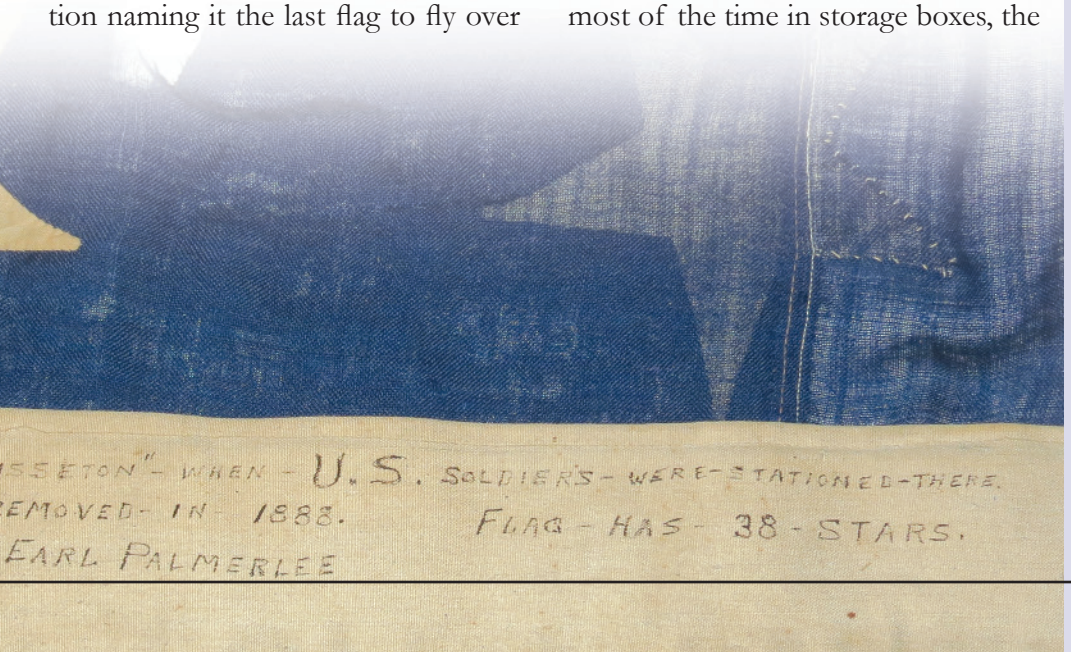
It was difficult to identify the flag's size and distinguishing features through the folded layers of archival tissue paper. According to the fort's archival database, however, this was the Palmerlee flag. With the help of a professional conservator, who happened to be on-site conducting a collections workshop, volunteers and staff meticulously unfolded and examined their discovery. Then began an intense process of researching genealogies, military records, and decades-old correspondence to determine if the newly-discovered flag was indeed the one that flew on Fort Sisseton's final day.

The research confirmed the flag to be a match. According to the US Quartermaster General's 1876 standards for military flags, the flag fit the 10- by 20-foot dimensions for a post flag—the flag flown daily over a military establishment. The flag's 38 stars correctly reflected the status of the union from 1877 to 1890. A professional conservator analyzed the flag's thread, fabric, and stitch work to confirm that they were appropriate for the time period.

Not only was the flag a physical match, but the Palmerlee family story also supported its authenticity. Written on the flag's header—the strip of canvas closest to the flagpole—is an inscription naming it the last flag to fly over Fort Sisseton and declaring it the property of Earl Palmerlee. Census records confirmed that Earl was the son of Albert Palmerlee and that he lived in the nearby town of Britton in the years after the fort's abandonment. The flag was truly the last tangible remnant of the fort's history.

Now, 125 years after the flag left the fort, the Fort Sisseton Commission hopes to return the flag to a place of honor in its original home. Given the flag's condition, a full-fledged conservation treatment is necessary. Often these types of treatments take place in a conservation lab in Minneapolis or Omaha. Instead, the flag will be worked on within the same buildings it flew over 125 years ago, and the hands that help renew it will be those of local volunteers. Volunteers will be led by a professional textile conservator, and the whole process will be part of a living exhibit this coming June. At various times, visitors will be able to witness the conservation project unfold in front of their own eyes, from relaxing the fibers, to cleaning away soils, to stabilizing the weak areas, and finally preparing the flag for permanent exhibit.

It's a well-deserved homecoming for the long-forgotten flag. After passing through many keepers, and spending most of the time in storage boxes, the 38-star flag will finally return to the fort in style. Local hands will restore it, local citizens will ensure its proper conservation, and visitors from across the country will learn the stories it tells.



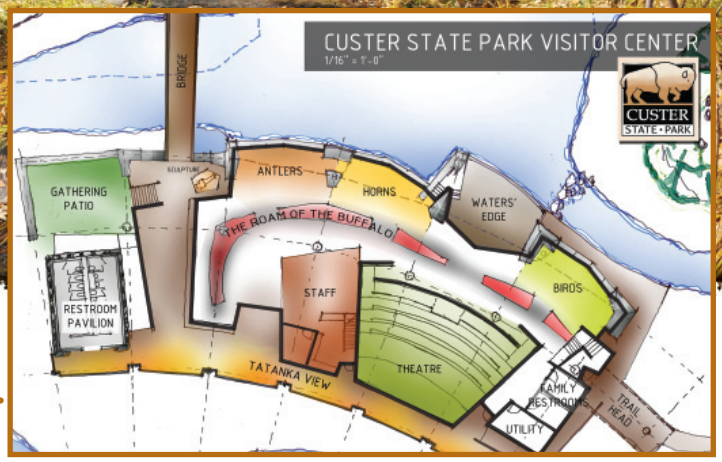
HOW YOU CAN HELP

The cost of restoring a flag with more than a century's worth of damage is significant. The South Dakota Parks and Wildlife Foundation has applied for local and national grants to fund some of the project. Donations are needed to match the grant money and fund the remainder of the project. You can be a part of making sure this rare connection to Fort Sisseton's frontier history is preserved for the education of generations to come. For information on how to donate, contact the SD Parks and Wildlife Foundation at 605-773-4503 or online at parkswildlifefoundation.org.

GREAT PLACES

TWO NEW VISITOR CENTERS GOAL OF PARKS AND WILDLIFE FOUNDATION

By *Dick and Sue Brown,*
on behalf of the Parks and Widlife Foundation



Concept drawing for Custer State Park Visitor Center. *Image courtesy ARC International*

When we head for a State Park, it is usually for recreational activities or scenery. But educational opportunities should be another focus of interest in both South Dakota's newest and oldest State Parks.

Good Earth State Park at Blood Run near Sioux Falls was designated South Dakota's 13th State Park in 2013. The thousands of visitors to this newest state park only have a trail guide brochure for background information. Excellent though it is, the brochure can only begin to tell the complex story of this National Historic Landmark site on the Big Sioux River, significant for its thousands of years of periodic and eventually constant habitation by indigenous peoples. South Dakota's Governor, Dennis Daugaard declared Good Earth State Park to be the state's top priority for conservation and resource protection because of its cultural, educational, and recreational value.

The nearly 2,000,000 annual guests at Custer State Park in the Black Hills may visit the Norbeck Visitor Center where there are several educational exhibits, naturalist programs, and ample print information. But like Good Earth, no contemporary orientation or interpretation is offered for the game preserve and recreation area founded in 1912. As Governor Daugaard has stated, "Custer State Park, rich in scenic beauty and recreational opportunities, has been designated one of the ten best places on Earth to view wildlife... It is time we provided visitors with a world class insight to all they can experience in one of America's Great Places."

Both Good Earth and Custer State Park have unique histories unlike any other park in South Dakota or the nation. Visitors from South Dakota and around the globe come to learn about and witness the wildlife, plant life, geology and hydrology and to enjoy the recreational opportunities and scenery of both Parks. They are also drawn to Good Earth because of its central role in Oneota Native American culture and history. Bison are one of the biggest draws at Custer State Park and there is a rich history of people, animals, and geology to explore.

Today's visitor experience can be greatly enhanced by providing state-of-the-art interpretive facilities that focus on the educational aspects of each park's unique history and resources and that supplement interpre-

Concept drawings for Good Earth State Park Visitor Center. *Images courtesy HDR Engineering, Inc.*

tive efforts already occurring at these Parks. These modern facilities will offer visitors new opportunities to learn about and experience these unique South Dakota places. The use of video productions, engaging exhibits and displays, and other forms of site interpretation are needed to help visitor's experience the wonders of these Parks.

In 2012, Governor Daugaard proposed that state-of-the-art visitor centers be built at both Parks as part of his Outdoor Heritage program. This program is intended to help pass on South Dakota's unique outdoor heritage, provide additional recreational opportunities, enhance education about South Dakota history, enrich visitor experiences and boost economic development at both ends of South Dakota.

The State Legislature and the SD Department of Game, Fish and Parks (GFP) both allocated funds to support planning and building these facilities with the help of private contributions to be raised by the South Dakota Parks and Wildlife Foundation. The Foundation is a nonprofit support organization for GFP.

Since last summer, architecture and engineering firms have been developing visitor center plans and cost estimates. The Foundation began fundraising for both Centers and has already raised several million dollars toward its goals. Given current cost estimates, the Foundation must raise over $1,000,000 more for Good Earth facilities and interpretation and approximately $2,000,000 for Custer State Park's Center and its surroundings. Contributions to the Foundation are tax deductible for federal income tax purposes.

The Foundation has applied for a grant from a private foundation that will match up to $500,000 in gifts and pledges for the Custer State Park Visitor Center until March 1, 2014. Because the State hopes to break ground on both facilities in the fall of 2014, the Foundation needs to raise these funds as soon as possible.

Image courtesy HDR Engineering, Inc.

For more information on sponsorship, recognition and contribution opportunities at either Visitor Center, contact Dick or Sue Brown, 605-673-4017 or brownassociates@goldenwest.net. To send a contribution to the SD Parks and Wildlife Foundation for these or other projects, mail a check to Wayne Winter, Executive Director, SD Parks and Wildlife Foundation, 523 E. Capitol, Pierre, SD 57501 or make an online contribution at parkswildlifefoundation.org.

Dakota Flora

PAPER BIRCH

by Dave Ode, GFP Botanist

... I'd like to go by
climbing a birch tree.
And climb black branches
up a snow-white trunk
Toward heaven, till the tree
could bear no more,
But dipped its top and
set me down again.
That would be good both going
and coming back.
One could do worse than
be a swinger of birches.

– From Robert Frost's "Birches"

Paper birch (*Betula papyrifera*) is a signature tree of the north woods. Winter or summer, its stark white trunks slashed with little black dashes and big black blotches, boldly stand out against snow cover or verdant green. Both New Hampshire and Saskatchewan proudly proclaim paper birch as their emblematic tree. The Anishinabe people (Ojibwe, Chippewa, Potawatomi) call it "Wiigwaasi-mitig" and regard it as a sacred gift. It is perhaps one of the most versatile trees on the planet.

Few trees extend as far north as paper birch, growing right up to the edge of the Arctic tree line. It is one of the most abundant, early successional trees of the vast boreal forest that stretches all across Canada extending south in the Rocky Mountains to Wyoming, south in the Appalachians to West Virginia, wraps all around the Great Lakes, and has disjunct populations in the Black Hills, the Laramie Range of southeast Wyoming, the Niobrara River Valley in northcentral Nebraska, and the southern-most stand located near Boulder, Colorado.

Paper birch is a relatively short-lived, medium-sized tree. While in the heart of its range, paper birch often reaches heights of 70 to 80 feet, in the Black Hills and elsewhere in South Dakota it is more likely to top out at 40 to 50 feet, and even less on poor sites. Most of its vertical growth is accomplished its first 60 to 70 years, with a total life span rarely exceeding 140 years. Small, winged seeds are produced in one-inch long female catkins, while pollen is produced in two to four inch-long male catkins, with the different catkins located on different branches of the same tree. These seeds and catkins are consumed by many different wildlife species ranging from ruffed grouse, to chickadees, to chipmunks.

Paper birch leaves, buds and twigs also provide forage for an assortment of northern forest animals. White-tailed deer and moose commonly browse on paper birch seedlings and saplings, as do snowshoe hares and beavers. Yellow-bellied sapsuckers commonly drill holes into paper birch trunks to get at the sweet sap. Like sugar maple, paper birch can be tapped for its spring rising sap which is boiled down into birch syrup or sugar, but it takes about 100 gallons of sap to make one gallon of syrup. There is at least one commercial producer of birch syrup, so if you would like to try it on your pancakes, just contact Kahiltna Birchworks in Palmer, Alaska.

Birch bark is like no other. You can peal off the outermost white bark as thin and fine as paper, or cut deeper into the layers, removing eighth-inch thick sheets of bark for stronger items. Birch bark is impregnated with natural plant oils that make it water-proof. When heated, birch bark becomes pliable and can be flattened or folded into different shapes. Sheets can also be sown together with basswood fibers and waterproofed with pitch from balsam. The Anishinabe people used birch bark shingles on their lodges and made birch bark canoes. They folded and sewed birch bark into an

amazing assortment of house-hold items including dishes, spoons, buckets, baskets, and other small and large containers. One folk art tradition uses thin bark folded and punctured by biting to make unique geometric patterns, flowers and animals. These Native American traditions have today become cottage industries with many birch bark items like baskets and other containers commercially produced and sold.

Lumber from paper birch is fine grained with very pale, white sapwood and light reddish-brown heartwood. It has about average strength and density, somewhat similar to hard maple. Because of its abundance across such a large swath of North America, paper birch is commonly harvested for firewood and lumber but is usually chipped for plywood and paper, or made into boxes, crates and small, specialty items like wooden spools. Yellow birch (*Betula alleghaniensis*), which grows in the northeastern U.S, is denser and stronger than paper birch and provides most of our dimensional birch lumber. Birch gun stocks, for example, most often come from yellow birch, or from one of the European birches like silver birch (*Betula pendula*), although once cut into logs, it is difficult to distinguish one birch from another. While the bark of paper birch is highly resistant to decay, birch wood rapidly decays, making it a better choice for indoor rather than outdoor use.

In the early 1920's, Frances Densmore interviewed more than 43 Chippewa people on 7 different reservations in Minnesota, Wisconsin and Ontario regarding their traditional uses of plants. Densmore documented the many ways that Chippewa people used paper birch and how they respected and revered this tree. One of the legends recorded by Densmore relates the gift of the birch tree and why it is marked with the sign of the thunderbird. According to the legend, a spirit being took the shape of a boy called Winabojo (Nanabozho/Nanabush) who, one day, wanted to kill the biggest fish in Lake Superior. To kill this fish he needed a bow with arrows fletched with the feathers of the thunderbird who nested among the clouds. Winabojo climbed a high cliff, changed himself into a rabbit and enticed the thunderbirds to carry him off to their nest. Once in their nest with their nestlings, Winabojo waited until the thunderbirds parents flew off to hunt, and then turned himself back into a human, killed the nestlings, took their feathers, and then jumped back to the earth. Before long the thunderbirds returned to their nest and found their dead nestlings. Enraged at this treachery, the thunderbirds plunged down out of the sky with thunder and lighting and searched for Winabojo. Soon they spotted him and chased him through the forest. Winabojo ran, this way and that way, until he was all worn out. Suddenly, he spotted a hollow birch tree and dove inside it. The thunderbirds unable to get at Winabojo left a symbol of birds in flight on the bark of the birch to forever commemorate their lost nestlings. When the thunderbirds had left, Winabojo slithered out of the hollow log and blessed the birch tree for saving his life. He said," As long as the world stands, this tree will be a protection and benefit to the human race..."

There are other, alternative telling's of how the paper birch got its markings; and there are many more adventures of Nanabush. One of the more recently published collections is *The Adventures of Nanabush: Ojibway Indian Stories*, by Emerson and David Coatsworth as told by Sam Snake and illustrated by Francis Kagige, published by Atheneum Books in 1980.

Like aspen, the leaves of paper birch turn bright yellow in the fall. Birch and aspen often grow side-by-side and together they turn mountain slopes and lakesides golden in the autumn sun. Paper birch can be easily cultivated as a lawn tree in the Black Hills and eastern South Dakota, but does not thrive in the dense soils and hot, dry winds of central or western South Dakota unless planted in a cooler, moister, microsite like a north-facing slope or on the partly shaded north side of a building. The next time you see a birch tree, look for the sign of the thunderbird and appreciate this handsome and versatile tree – a gift to all.

Photo © Dave Ode | SD GF&P

Photo © Laura Meyers

The thunderbird's mark on a birch tree. Branch scar of a birch trunk (top), comparison with a red-tailed hawk (bottom).

WINTER AT THE OUTDOOR CAMPUS

by Sandy Richter

"Got Cabin Fever? Get out of the Cabin!" That's one of our favorite winter expressions at The Outdoor Campus.

Did you know that TOC also has some excellent winter activities to keep you and your families active and busy in the outdoors? Throughout the winter we offer ice fishing, snowshoeing, and cross country skiing to participants in our community and group programs as well as our school programs.

ICE FISHING

Ice fishing requires a little more gear than regular shore fishing in the summer time. Ice augers, an underwater camera, a shovel and cleats for our shoes are just some of the extra things we bring along. Sitting on a bucket with 4-plus inches of ice underneath watching a little bobber go down might not sound like fun to you, but if you are dressed for the weather, it can be very relaxing and fun!

During our ice fishing classes we discuss safety and equipment before we even head on to the ice. We keep busy on the ice watching our poles, and if the fish aren't biting, we check out the habitat below the ice with our underwater camera or by drilling holes with hand augers. Ice fishing at TOC is a great opportunity to introduce families, young children and groups to another fishing adventure.

SNOWSHOEING

If you can walk, you can snowshoe. The idea behind the snowshoe is to help distribute the weight of the person using them so that they don't sink down in deep snow. Rather, they are able to travel easily over inches and feet of snow.

Variations of snowshoes have been around for thousands of years to help hunters and outdoorsmen navigate the snow-covered terrain helping to provide food for their families. Today, many hunters still use snowshoes to get where they need to go in the winter, but the snowshoes are much smaller now.

Traditional snowshoes were made with a wood frame and animal hide laced to form a deck and averaged 5-7 feet long. That worked great in open terrain areas where there were no trees. Today's snowshoes rarely exceed 3 feet in length (allowing easy travel through wooded areas) and are made with aluminum and plastic. Your weight is still distributed with the shorter snowshoes because the decking is a solid platform offering more flotation per square inch.

Snowshoeing at TOC is pretty easy. You need to come dressed for the weather with snow boots. The bindings on the snowshoes will attach to your boot. We will lead you outside on a winter hike to explore what nature does in the colder months, or we may send you out with an orienteering map to explore the trails. This is a great activity for young and old.

CROSS COUNTRY SKIING

Cross-country skiing is a low impact, total body workout. Is cross country skiing like downhill skiing? No, not really. You use different, more narrow skis. Your boots are not interchangeable with downhill ski boots. You are moving your legs, core and arm muscles to glide across the plains and

Photo © Keith Anderson

maybe some low rolling hills rather than just heading down hills, letting gravity move you down.

At TOC we provide cross-country skis, boots and poles. Programs are offered when we have at least 4 inches of snow.

When the ice and snow are just right here at TOC, we stay really busy with ice fishing, snowshoeing and cross-country skiing classes. Sometimes it's hard to get into a class. Watch our website www.outdoorcampus.org and Facebook page for extra classes that are added or schedule your own group program.

HOW CAN I HAVE FUN IN WINTER AT THE OUTDOOR CAMPUS?

Other dates to keep in mind are January 25th, **Women's Winter Try It Day**, and February 22 for the **Ice Fishing Extravaganza**.

Want to go ice fishing or snowshoeing somewhere else with your family or boy/girl scout group? No problem, we also have crates that you can check out for a $75 deposit. There is an ice fishing crate with 19 rods and other needed supplies. For snowshoes, choose from 2 group crates that contain 16-20 pairs of youth and adult sizes or 3 family crates that contain 4 youth and 4 adult pairs. You can reserve the crates for a week at a time as long as we have adequate snow (4-6 inches).

If you have your own cross-country ski equipment, great! Our trails are groomed by Sioux Falls Parks and Recreation.

Get maps at our front desk or at www.siouxfallsparks.org.

Pretty Little Liars

The Art of Deception in South Dakota's Sneakiest Critters

By Casey Heimerl, SD GFP Wildlife Biologist

The American lady butterfly has spots on the fore and hindwing that look similar to the eyes of an owl.
Photo © Gary Marrone

Imagine walking across South Dakota's grasslands on a beautiful sunny day. You come over the crest of a hill and find yourself in the middle of a prairie dog town. Suddenly, you hear the dreaded rattle and hissing sound that can bring chills to the bravest outdoors person and you high-tail it out of there as fast as your legs can take you. While it would be easy to assume you just survived an encounter with the notorious prairie rattlesnake, you may have actually just passed by some harmless little burrowing owls. How embarrassing! When threatened, burrowing owl chicks are known to mimic the sounds of rattlesnakes to scare away approaching predators. This form of deception is called "acoustic mimicry", where a harmless or defenseless species copies the sounds of a more dangerous species in order to avoid predation.

Besides sound imitation some species have unique coloration to avoid being eaten. Butterflies are known for their amazing color combinations and patterns but this pigmentation serves a more important function than just being pretty. Several butterfly species in South Dakota like the American lady have spots on their wings that when flashed appear to look like the eyes of a predator such as an owl. Caterpillars of some butterflies like the eastern tiger swallowtail also have eye markings making them appear like a predator rather than a delicious package of protein. Caterpillars of the red-spotted purple use a less appealing technique and prefer to mimic bird droppings to appear less appetizing. Another deceptive butterfly defensive technique is seen in hairstreaks. These species have long, thin "tails" at the end of the wings which in combination with the wing coloration create a fake head that misdirects attacking predators.

In contrast to defensive mimicry, some predators use aggressive mimicry techniques which involve mimicking a harmless species in order to avoid detection and attract prey. One example is the "femme fatale" lighting bug. Female lightning bugs in the genus Photuris mimic and respond to the flashes of male lightning bugs of other species. The male is drawn in thinking he found a perfect mate but instead is captured and eaten by the female. Similarly, certain spiders are capable of producing pheromones that attract moths or other insects for food.

Mimicry techniques are not just unique to the animal kingdom. In South Dakota, there are a few plant and fungi species that also use deceptive techniques to increase their chances of successful reproduction. Species in the orchid family are well known for their clever pollination techniques that use mimicry to lure in pollinators. The fairy-slipper orchid, found in the Black Hills, has bright yellow tufts extending up the lower petal into the entrance of the flower that resembles stamens covered in pollen. While to a bee this coloration looks appetizing, once inside it finds that it has been cheated out of a meal since this orchid actually does not produce any nectar. In the process of the bee's futile search for food a pollen sac is attached to its back which is then dispersed resulting in pollination.

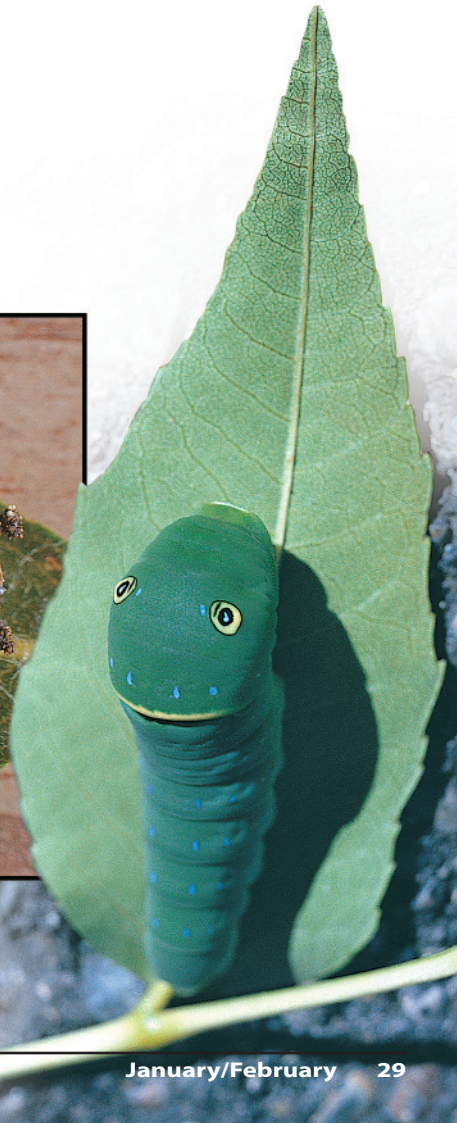
Some plants and fungi prefer to attract species that are drawn to less appealing sights and smells. The upright carrion-flower and the stinkhorn mushroom both emit odors similar to rotting flesh. The scent attracts flies and beetles which lay eggs in dead carrion. As the insects walk across the surface of the plant or fungi they aid in reproduction by picking up and dispersing pollen or spores.

Camouflage is another form of deception and like mimicry, it can be "defensive", to avoid detection from predators, or "aggressive" to avoid detection from prey. There are numerous examples of wildlife camouflage techniques; however a few notables are worth mentioning. Two species of gray treefrogs found in eastern South Dakota are capable of changing colors from bright green to gray/brown within minutes in order to adjust their camouflage to best fit in with their surroundings. The white-tailed jackrabbit and three species of weasels (long-tailed, short-tailed, and least) are also capable of changing their coloration to adjust to seasonal changes in their surroundings. During the fall these species molt into white coats so they can disappear in the snow. As spring arrives and the snow melts they will change back to their brown color.

In the life of predators and prey, nature can be cruel at times but it is always full of surprises. Being successful may be all about the survival of the fittest but being the cleverest seems to pay off as well.

The fairy-slipper orchid's deceptive coloration may look appetizing to a bee but the flower does not actually produce any nectar. During the bee's futile search for food it aids the flower in pollination.

Photo © Jeanne Ode



LEFT: The red-spotted purple caterpillar's coloration disguises it as bird droppings.

RIGHT: The eastern tiger swallowtail caterpillar has deceptive eye markings disguising it as a predator.

Photos © Gary Marrone

ParkNotes

REGISTER FOR 17TH ANNUAL MICKELSON TRAIL TREK

PIERRE, S.D. – Online registration for the 16th Annual Mickelson Trail Trek are now open. Bicyclists can sign up at www.MickelsonTrail.com. Game, Fish and Parks officials encourage riders to sign up early to ensure a spot in the Trek, which will be held Sept. 19-21, 2014.

The annual supported ride highlights the George S. Mickelson Trail as it winds through the heart of the Black Hills from Edgemont to Lead/Deadwood. The ride began in 1998 as a celebration of the completion of the rails-to-trails project. The Trek continues today to introduce new bicyclists to the trail and to thank supporters for their long-standing enthusiasm for the trail. Riders on the Trail Trek will cover the entire 109 miles of the trail over three days, from Friday, Sept. 19 through Sunday, Sept. 21.

Registration before July 1 with merchandise is $180, without merchandise is $150. Registration after July 1 is $180, and merchandise is not available. The registration fee for the 3-day ride includes the trail pass, shuttle service, refreshments and some meals during each day's ride. Riders are responsible for accommodations and mechanical support. The ride is open to all bicyclists 14 years of age or older.

Pre-registration is required and may be completed online by visiting www.MickelsonTrail.com and following the "Trail Trek" link. Registration cutoff is September 1, 2014. For more information on the Mickelson Trail or the 3-day Mickelson Trail Trek, visit www.MickelsonTrail.com or contact the Black Hills Trails office at 605-584-3896.

MAKE CAMPING RESERVATIONS FOR THE UPCOMING SEASON

Even if there is still snow on the ground, it's not too early to be planning your summer camping trip.

Reservations for Friday, May 16, Open House Weekend at South Dakota state parks and recreation areas, open February 15. Reservations for arrivals on the Friday of Memorial Day weekend open February 22.

When making reservations, keep the following in mind:

- Reserve online at www.campsd.com or call 1-800-710-CAMP (2267). Campsite reservations open at 7 a.m. CST 90 days prior to arrival and can be made 24 hours a day, seven days a week.
- Campsite and cabin reservations can be made up to 90 days before arrival (starting at 7 a.m. the first day) at most state park areas. The 90-day calendar is available online at www.gfps.sd.gov . At Custer State Park, reservations can be made up to one year in advance.
- Several sites may be reserved with one phone call, but payment of all fees for all sites is required before a confirmation is granted.
- A three-night stay is required on holiday weekends at all parks except Custer State Park.
- There is a $7.70 non-refundable reservation fee (not applicable to South Dakota residents).
- A cancellation fee equal to one night's camping fee will be charged if you cancel your reservation, either through the reservation center or after arriving at the park.

For more information on reservations, including the full 90-day window calendar, visit the state parks website at www.gfp.sd.gov.

FREE ENTRANCE, FREE FISHING MARK S.D. STATE PARKS' OPEN HOUSE WEEKEND

PIERRE, S.D. – To kick off summer, the Department of Game, Fish and Parks is encouraging families to spend the weekend outside during the Parks' Open House Weekend and Free Fishing Weekend May 16-18.

During the annual three-day event, anglers can fish without a license anywhere in the state, and entrance fees are waived for all visitors to South Dakota's state parks and recreation areas. Camping fees still apply. Fishing regulations and limits apply.

Parks will be hosting a variety of Open House Weekend special events across the state. Check parks for details.

Custer State Park will host a number of family activities both Saturday and Sunday, including cookouts, nature hikes, free hayrack rides, a fishing derby, nature programs and demonstrations. A full schedule of events can be found on the state park's website.

South Dakota state parks offer a wide variety of outdoor fun, including camping, picnicking and boating. Many parks also offer trails for hiking, mountain biking and horseback riding.

For information on fishing, fishing licenses and fishing regulations visit the GFP website at www.gfp.sd.gov. Find more information on the South Dakota state park system online or call 605-773-3391.

OAHE WALLEYE LIMITS LOWERED

PIERRE, S.D. - Standard statewide harvest restrictions for walleye are in effect on Lake Oahe as of Dec. 15, 2013. Anglers will be allowed four walleye per day; however, no more than one may be 20 inches or greater in length.

There is no minimum length limit and walleye kept from Lake Oahe count as part of the statewide possession limit of eight fish.

Anglers looking for additional information on the current status of the Lake Oahe fishery can attend one of four public meetings in January and February.

Fisheries staff will be presenting results from 2013 survey work, answering questions and taking input from anglers on the Lake Oahe fishery. Meetings will be held in Aberdeen, Pierre, Sioux Falls and Rapid City. As meetings are finalized, dates, times and specific locations will be released and advertised accordingly.

For additional information on fisheries regulations.

GOVERNOR MAKES APPOINTMENTS TO GAME, FISH AND PARKS COMMISSION

PIERRE, S.D. - Gov. Dennis Daugaard has appointed Scott Phillips of Hereford and Paul Dennert of Columbia to the South Dakota Game, Fish and Parks (GFP) Commission.

The Governor also reappointed John Cooper of Pierre to the Commission.

"The work of the Game, Fish and Parks Commission is invaluable to the management of our public resources," Gov. Daugaard said. "I thank Scott, Paul and John for their willingness to serve."

Phillips is a rancher and co-owner of River View Lodge in rural Meade County. He will serve the remaining two years of former Commissioner Bill Cerny's term and be eligible for reappointment to a full four-year term in 2016.

Dennert is a farmer and cattleman. He served in the state House of Representatives from 1993 - 1997 and 2005 - 2013, and in the state Senate from 1997 - 2005. He will fill the position held by former Commission Chair Susie Knippling.

Cooper is a former GFP Department Secretary who has served on the Commission since 2010.

All three appointees will be subject to Senate approval.

BLACK HILLS MOUNTAIN LION SEASON OPEN

PIERRE, S.D. - The 2014 South Dakota resident-only mountain lion hunting season for the Black Hills Fire Protection District opened on Thursday, Dec. 26.

The season for the Black Hills is open through March 31 unless a harvest limit of 75 mountain lions or 50 female mountain lions is reached at an earlier date.

All mountain lions harvested within the Black Hills must be presented to a Game, Fish and Parks Department representative at the Rapid City office (4130 Adventure Trail) or the Custer State Park Headquarters within 24 hours of harvest for inspection.

Residents may purchase one 2014 mountain lion hunting license. The license is not only valid for the Black Hills season, but also valid Jan. 1 - Dec. 31 on land that is located outside of the Black Hills Fire Protection District.

Licenses may be purchased by application through the mail or online through the Game, Fish and Parks Department website.

Hunters will find updates on the harvest of mountain lions in the Black Hills at the locations listed below.

2014 APPLICATION DEADLINES

	RES	NONRES
PRONGHORN		
Archery Antelope	No deadline*	No deadline*
Firearms Antelope	Aug. 8	Aug. 8
DEER		
Special Buck	April 18	April 18
Custer Park Deer	July 18	NA
Muzzleloader	Aug. 29	Aug. 29
Youth Deer	No deadline*	No deadline*
National Wildlife Refuge	Aug. 29	Aug. 29
Black Hills Deer	July 18	July 18
West River Deer	July 18	July 18
East River Deer	Aug. 29	Oct. 10
Archery Deer	No deadline*	No deadline*
ELK		
Black Hills Archery EIK	May 23	NA
CSP Archery Elk	May 23	NA
CSP Firearms Any Elk	May 23	NA
CSP Firearms Antlerless	May 23	NA
Black Hills Firearms EIK	May 23	NA
TURKEY		
Black Hills Spring Turkey	No deadline*	No deadline*
Spring Prairie Turkey	Feb. 14	Feb. 14
CSP Spring Turkey	Feb. 14	NA
Fall Turkey	July 18	July 18
WATERFOWL		
Nonres Early Fall	NA	July 11
Nonres Fall Waterfowl	NA	July 11
Tundra Swan	Aug. 8	Aug. 8
Special Canada Goose	July 11	NA
OTHER		
Mentored Hunts	No deadline*	NA
Archery Paddlefish	May 16	May 16
Paddlefish Snagging	May 16	May 16
LFC Paddlefish	Feb. 14	NA
BH Bighorn Sheep	May 16	NA
Mountain Lion	No deadline*	NA

**Applicants may purchase a license throughout the season by applying to the License Office in Ft. Pierre either online or through the mail. Please allow ample time (7-10 business days) for the license to be processed and mailed to you before you leave for your hunt. These licenses are not sold at any other GF&P office.*

Game, Fish & Parks
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