**SOUTH DAKOTA**

**STATE REPORT**

Kelly Hepler, Secretary

South Dakota Game, Fish and Parks

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**2016-2020 Strategic Plan**

 The South Dakota Game, Fish and Parks’ (GFP) mission is to provide sustainable outdoor recreational opportunities through responsible management of our state's parks, fisheries and wildlife by fostering partnerships, cultivating stewardship and safely connecting people with the outdoors. Customer service is a large part of this mission and continues to be at the forefront of who we are as an agency. Listening to customers, making changes to accommodate their needs, being helpful, courteous, transparent and reliable are all ways to building lasting relationships with them.

 Throughout 2016, customer service became the driving force behind the development of the first ever, department-wide strategic plan. By 2017, implementation of the four long-range goals, 22 objectives and shorter-term strategies was underway. On March 30, 2017, the first quarterly review session took place to primarily review the 2017-2018 priorities as determined by the department secretary and the department’s leadership team. The meeting also allowed the team to complete the following: identify year-to-date strategic plan success and return of investments, present management, tracking and reporting processes, develop key assumption statements, identify challenges and solutions and discuss the budget timeline and process development.

 Of the 57 priorities outlined for 2017-2018 (made up of strategies and measurable outcomes), 30 are in progress and on track, 15 have been initiated, 10 have not had any progress at all and 2 have been completed to date.

 For details on how the department approached the planning process, please visit <http://gfp.sd.gov/agency/information/default.aspx>.

**Economic Impact Study Completed**

 The South Dakota Game, Fish and Parks (GFP) has historically relied on estimates from national surveys to determine the economic effects of wildlife-associated and outdoor recreation. In 2016, however, GFP commissioned Southwick Associates to specifically estimate the economic activity generated by hunting, fishing, state park visitation and other outdoor recreation activities in South Dakota. Large numbers of hunters, anglers, and outdoor recreationists spend many days enjoying South Dakota’s diverse outdoor recreation opportunities.

* Both residents and non-residents who visited state parks in 2016, fished, hunted, trapped, boated or viewed wildlife in South Dakota recreated for a combined total of 18.6 million days.
* Participating in these activities typically involves spending money on travel, supplies, and equipment, making the annual amount of these expenditures a significant contributor to the state’s economy.
* Collectively anglers, hunters, trappers, wildlife viewers, boaters, state park visitors, and snowmobilers spend $1.3 billion in South Dakota annually in support of these activities.

 The top three activities accounting for nearly 90 percent of the $1.3 billion are hunting ($683 million), fishing ($271 million) and state park visitation ($212 million).

The money spent, however, is only one part of the total economic effect associated with wildlife-related and outdoor recreation. The $1.3 billion spent by those enjoying South Dakota’s outdoor resources has a significant effect on the state’s economy, generating directly and indirectly nearly $1.9 billion in economic activity throughout the state.

This outdoor activity supports an estimated 18,000 full and part-time jobs which provide $520 million of income.

* In addition, it contributes over $970 million to the state’s GDP, and generates over $83 million in tax revenue for state and local governments.

**GFP Aquatics Data Management System Nears Completion**

Game, Fish and Parks has been working with ESRI, an international GIS and data management company, on development of a standardized database for housing, analyzing, and disseminating fisheries data collected in South Dakota. The project is nearing completion. Staff will have the ability to remotely collect data on digital tablets, download data directly to the database, and then analyze the information. The new process will greatly reduce staff time spent entering and analyzing data.

One of the most exciting aspects of the new data management system will be the “one-stop shopping” for both internal and external publics to gain access to fisheries data collected by the department. Working with the mapping capabilities of ESRI, much of the fisheries information that was previously housed within individual offices around the state will now be available on a point and click map of South Dakota. This data dissemination tool will aid all types of fish information seekers from department administrators to university researchers to anglers.

One of the biggest benefits of working with ESRI on development of the data management system is the lack of custom applications. With most of the applications utilizing ESRI supported products, annual maintenance and regular re-building of the system will not be necessary. This will be a major cost savings to the State of South Dakota.

**Introduction of Walleye into Selected Black Hills Fisheries Planned**

Due to increasing interest by anglers for more diverse fishing opportunities within the Black Hills, GFP investigated the topic of introducing walleye into Black Hills fisheries. In an attempt to better identify angler wants and desires regarding introducing walleye in the Black Hills, GFP created a short information video and an online survey on the topic, which was distributed to all anglers with a valid email address. Results from this survey indicated that while a large number of anglers were in favor of walleye being introduced into the Black Hills, there were a proportion of anglers who were not in favor of walleye being stocked in the area. As a result, GFP will be stocking walleye into two of the four large reservoirs in the Black Hills. The goal of this is to provide the opportunity for anglers to fish for walleyes in Sheridan and Stockade reservoirs, while still providing opportunity for coldwater species where walleye will not be part of the fishery in Deerfield and Pactola reservoirs.

**Lake Oahe Walleye Tagging Study**

GFP began a tagging study in 2013 to learn more about walleyes in Lake Oahe and the Garrison Reach of the Missouri River. This project is a cooperative effort between South Dakota State University, North Dakota Game and Fish Department, and GFP. Changing conditions in Lake Oahe following the 2011 flood spurred recent tagging efforts. A large reduction in rainbow smelt abundance was of particular concern. The current study is helping GFP understand how walleyes respond to low prey abundance. Thankfully, coldwater prey fish numbers (both rainbow smelt and lake herring) started to bounce back over the last few years, affording us an opportunity to also understand how the Lake Oahe walleye population responds to a *recovering* prey supply.

A total of 34,358 walleye were tagged from 2013 through 2016. Tagging took place at 29 different locations, from Garrison Dam to Oahe Dam. Tagging efforts began in early April and ended in mid-to-late May each year. So far, a little over 20% of the walleye tagged have been caught and reported. Because the vast majority of tag returns come from harvested fish, we know where a fish was initially tagged and where it was when it was caught; we don’t know where it was in between, but we can infer the *minimum* distance traveled. Some interesting movement trends include:

* A 13.5 inch male walleye traveled 298 miles downstream in one month.
* In general, fish tagged further downstream tend to be encountered closer to their original tagging location than fish tagged in the upstream portion of the reservoir or in the Garrison Reach.
* Males and females tagged at the same location show different movement patterns. For the majority of tagging locations a greater proportion of females are captured downstream.
* There is also evidence to suggest that larger fish move further distances.

Natural mortality varies within Lake Oahe, but decreased throughout the study. In 2013, a liberal bag limit (8 fish/day) allowed anglers to capitalize on a large population of small walleyes hatched in 2009. Estimates from creel surveys suggest that 2013 was the highest harvest on record for Lake Oahe, at over 700,000 fish. Estimated exploitation was 26 % in 2013, which is well below what is considered too high for a walleye population.

**Yellow perch production at Blue Dog Hatchery**

 Hatchery staff continue to work on techniques to improve yellow perch survival from the egg to the fingerling stage. Recent findings have indicated that reducing formalin concentrations from 1,667 to 834 mg/L during 15 minute prophylactic treatments does not decrease egg survival and will produce longer fry at hatching. Longer fry at hatching likely has positive effects on post-stock survival. Additionally, experimental structures are being used to incubate eggs in tanks rather than in heath trays where egg suffocation is more likely to occur during the final days of development. Preliminary results indicate that the tank structures allow increased water flow to occur which reduces egg mortality due to suffocation and thereby allows the eggs to be incubated for a longer timeframe before being stocked. Finally, placing eyed eggs on conifer trees has produced higher survival to the fingerling stage compared to other stocking techniques that have been attempted during previous seasons in hatchery ponds.

**AIS Regulation Changes for 2017**

The Game, Fish and Parks Commission made significant changes to the AIS regulations for 2017 in response to zebra mussel infestations in Lewis and Clark Lake and the Missouri River below the reservoir. These regulations work together as a package, not only to protect South Dakota lakes and rivers from new AIS introductions, but also to make compliance faster and easier for boaters and anglers. Rule changes include:

* Creating a list of waterbodies that will be classified as Containment Waters. These are waterbodies that have an AIS of concern in them and require special designation to facilitate management efforts.
* Allowing the creation of Local Boat Registries at Containment Waters. The Local Boat Registry program will give boaters that participate the freedom to more easily transport and store boats locally in areas with Zebra mussel infestations, while restricting their movement to other waterbodies unless they are decontaminated.
* Requiring boats to be decontaminated if they are used on a containment water and either have a ballast tank with undrained water (like a wakeboard boat) or are moored in a containment water for more than three days.

 The purpose of these rules is to ensure that water that may hold mussel veligers and boats with very small mussels attached to the hull are properly cleaned before they are used in a different waterbody.

**Customer Service and Communication**

 Customer service is the foundation of how we conduct business at the South Dakota Game, Fish and Parks (GFP); whether it is in person, in the field or park, on the phone, online or through our social channels.

 In an effort to provide expanded coverage outside of current business hours, as well as increase available personnel, GFP began contracting with Five Star Call Centers in Sioux Falls on September 13, 2016. GFP customers no longer receive a busy signal and they have an opportunity to speak with an individual, seven days a week, 7 a.m. – 9 p.m. CT. To date, the call center has fielded over 19,000 calls on behalf of the department.

 Sending targeted emails to hunters, anglers and campers is one of the best ways to inform them on topics such as: season dates and regulation changes, application openings and deadlines, commission meetings and agenda items, news and reminders, state park activities and events and more all related to the outdoor opportunities provided in this state. Annually, GFP typically sends over 230 emails to hunters, anglers, campers and other outdoor enthusiasts. In 2016, these emails went out to a total of 6,014,847 million different email inboxes.

 With nearly 35,000 page likes on Facebook, 6,400 followers on Twitter and over 1,100 Instagram followers each of these platforms proves that GFP continues to stay responsive to customer needs while listening and engaging in two-way digital conversations. On May 1, 2017, the department launched a #BehindtheBadge campaign which features weekly videos and photos from conservation officers and park rangers; allowing our customers to get to know them a little better and understand why they are vital to the communities in which they reside. To date, the #BehindtheBadge campaign has reached more than 135,000 individuals on Facebook and Twitter.

 Currently, our department is undergoing the reconstruction of a new website and mobile app. At the 30,000 foot level, gfp.sd.gov is serving its purpose, but based on analytics, users are accessing the most common features and not finding other buried content. Based on research and feedback, a variety of information is hard to locate and key information is not highlighted in a way that is visible or searchable for the user. GFP customers are gearing up for their next outdoor adventure, right now. They are seeking advice, comparing brands and making purchase decisions. It’s not enough to just build a website or mobile app and expect customers to end up there. Through the reconstruction process, GFP is committed to helping inspire customer confidence in the agency while enhancing the user experience which sets the stage for the next phase – marketing automation. The site and mobile app will launch in December.

**State Parks Remain Popular Destinations**

 South Dakota state parks set yet another record in 2016. The number of camping units served in state park and state recreation area campgrounds was up four percent from 2015. The park system’s nearly 4,200 campsites and 215 camping cabins hosted over 328,000 camping units and visitation exceeded 7.3 million. Park use in April, May, September and October was significantly up indicating that marketing that spring and fall are great time to use the parks is being heard. A new visitor center at Custer State Park hosted nearly 200,000 of the park’s 1.9 million visitors in 2016 and hopefully encouraged them to extend their stay in the Black Hills region.

 Volunteer service in the parks also continues to rise, and will set a record for the third year in a row. In 2016, over 400 individuals and 10 groups contributing over 115,000 hours in parks across the state. This is an equivalent of 55 FTE. Visitor experiences are greatly improved by volunteers, who contribute their time and talents in positions such as campground hosts, maintenance workers and special event helpers.

**State Park Visitor and Education Centers Being Developed**

 An outdoor education center is being developed at South Dakota’s oldest state park while a new visitor center opens in the state’s newest state park. Custer State Park’s 80-year old former visitor center is being refurbished as an outdoor education center. The education center is on pace to open this fall and will feature indoor and outdoor classrooms, nature displays, youth activity space, a reference room, a mineshaft and a nature based playground. At Good Earth State Park, established in 2013, an $8.6 million visitor center was opened to the public in May, 2017. The 11,000 square foot visitor center interprets the story of the Omaha/Ponca and Ioway/Otoe people who called the area home for over 250 years during the middle of the last millennium. In addition to the exhibits and a 19 minute film, over 100 historical educational and interpretive programs will be staged from the visitor center each summer. The visitor center and grounds will be available for private and public events. Funding for both the Custer State Park education center and Good Earth State Park visitor center came primarily from private donors through the effort of the South Dakota Parks and Wildlife Foundation. Split Rock Studios of Minneapolis provided much of the design work and exhibit fabrication for both centers.

**Mickelson Trail to Mount Rushmore Connector Trail Environmental Impact Study**

 The 114 mile long George S. Mickelson Trail is one of the most popular biking/hiking trails in the United States. Game Fish and Parks has proposed a 15 mile spur trail that would connect the trail to Mt. Rushmore National Memorial. Much of the trail would traverse U.S. Forest Service property, making the Forest Service the lead agency for the EIS. The EIS continues to be on hold as the Forest Service has not directed the consultant, HDR, to conduct any further analysis. After the EIS is completed by the Forest Service, the National Park Service will also complete a project review process focusing on resource impacts and bike allowances at Mt. Rushmore.

**Park Management Major to be reestablished at South Dakota State**

 Over the past year, Department staff has worked with South Dakota State University faculty in the College of Agriculture-Biology’s department of Natural Resources to reestablish a Park Management major. Several years ago the major was transferred to the College of Education & Human Science’s department of Health and Nutritional Science and suffered from a lack of natural resource and land management emphasis. The Parks Division and the College have worked together to develop a curriculum that will emphasize 4 critical knowledge components to enable students to successfully operate in the field of park management: 1) natural resources, 2) business management, 3) human dimensions, and 4) land management/planning practices. Currently the new major has received approval from within the University and is awaiting approval of the Board of Regents at a June 2017 meeting.

**State Recreation Area offers Deer and Turkey Hunts for Disabled Hunters**

The 24th annual Oahe Downstream Recreation Area Hunt, which allows hunters in wheelchairs to deer hunt, was held in November. Nine hunters participated and eight successfully filled their tags. One of the hunters took the largest buck ever harvested at Oahe Downstream. In addition, the Oahe Hunt was presented with an amazing and inspirational donation this year. Jacob Haas of Sioux Falls celebrated his eighth birthday by asking his friends to donate money to a worthy cause, rather than bringing a gift. Jacob then partnered with his local Scheels sporting goods store to provide 12 new shooting bags for the hunters at the Oahe Hunt. The hunt is sponsored by the Game, Fish and Parks and the Corps of Engineers. Game, Fish and Parks sponsors a turkey hunt at the park for wheelchair bound hunters each spring.

**Capital Campout and Outdoor University Successful**

 The first-ever Capital Campout on June 10-12 hosted 59 families for campfire songs, treats and tent camping on the state Capitol lawn. On Saturday, the campers joined nearly 800 others for Outdoor University, which feature activities such as air rifle shooting, archery, kayaking, canoeing, fishing, campfire cooking and more. The event was successful in reaching folks new to the outdoors. A survey of participants indicated that within the last year, nearly 45% had not been camping, 50% of attending families hadn’t went hunting, and 56% had went fishing twice or less.

**Spearfish Canyon**

 The Game, Fish and Parks Department purchased 73 acres of land in the Black Hills that encompasses Spearfish Falls. For most of a century, the land was owned by Homestake Mining Company and the waterfall was silent, having been diverted for gold processing purposes. With the mining era over, the waterfall which several generations never saw, is now flowing and is a favorite stop in scenic Spearfish Canyon. The Department has made substantial improvements to the trail leading to the falls and plans to dedicate the improved trail in the fall of 2017.

**Pollinator Plots Established in State Park Areas**

 Working side by side with local volunteers, school groups and Pheasants Forever club members, state Game, Fish and Parks staff established or prepped for pollinator plots in thirteen state park area. In addition to the pollinators attracted and habitat provided, the plots will be a tool for nature programming this summer.

**2016 Walk-In Area Program for Hunter Access**

Over 1.2 million acres of private land were enrolled statewide in the Walk-In Area (WIA) program providing public hunting access by 1,436 cooperators. GFP also leased private land for public hunting access through our Controlled Hunting Access Program (CHAP) which provides additional flexibility for the landowner and more control of the number of hunters using the area. Nine CHAP areas totaling 20,000 acres were enrolled statewide in 2016 providing over 900 hunter days of use.

**Animal Damage Control & Wildlife Damage Management**

South Dakota’s predator control program is operated cooperatively between South Dakota Game, Fish and Parks (SDGFP) and USDA-APHIS-Wildlife Services (USDA-WS). SDGFP provides predator control primarily with ground methods (i.e. traps, snares, calling, and shooting) while USDA-WS provides predator control via aerial control, exclusively. Due to a fatality in another state in December 2016, USDA-WS grounded aerial predator control operations nationwide, until safety protocols and procedures could be reviewed. This action left many South Dakota producers without aerial predator control services at a critical time as many livestock producers begin calving in January and February. Producers in a few areas were able to utilize local predator control districts for aerial predator control assistance coordinated by SDGFP staff, but the majority of producers did not have access to these services. In late-January, SDGFP initiated an emergency contract with a pilot from a nearby state to provide aerial predator control services in western South Dakota while USDA-WS’s aircraft were grounded. This contract aircraft flew over 125 hours and removed more than 400 coyotes at a critical time for livestock producers. USDA-WS aerial operations resumed in late-February. Since that time, both aircraft have been extremely busy and combined have flown more than 400 hours. These activities, combined with SDGFP’s ground efforts have impacted more than 500 livestock producers and have removed over 3,000 coyotes, statewide.

This past winter, South Dakota experienced a severe winter with deep snow in many areas. Over 300 landowners requested assistance from SDGFP with deer damage to stored livestock feed. Most deer depredation assistance involved the use of protective fencing and panels as well as hazing techniques and short-stop feeding. In addition, GFP authorized over 963 deer depredation tags on 37 different depredation hunt locations, all in western and central South Dakota. This large number of depredation tags was a record for the program within the last 15 years. Due to the large amount of deer depredation that landowners experienced, SDGFP will be organizing a stakeholder meeting this summer to evaluate and adjust programs and services to better meet the demand from private landowners. In 2017, there was legislation passed that earmarked an additional $200,000 (from a transaction fee increase when hunting licenses are sold by vendors) to wildlife depredation assistance. These additional funds will bring SDGFP’s wildlife damage management budget to approximately $2 million, statewide.

**Pheasant Population Status & Harvest**

During the 2016–2017 pheasant hunting season, 61,746 resident and 81,270 non-resident hunters harvested an estimated 1,172,000 rooster pheasants. Total pheasant hunters decreased by 5% while total harvest declined 7% from the previous year. Harvest averaged 1,513,000 during the previous ten years. The estimated pre-hunt population estimate was 8.2 million (95% CI: 7.4–9.2 million), a 7% increase from the previous year estimate of 7.7 million. The previous ten years’ average was 8.4 million. The decline in harvest was mostly due to fewer hunters as the average harvest per hunter remained nearly unchanged at 8.4. Fewer hunters may have been in response to the 19% decline in the August roadside pheasant survey. The disagreement in trend between the population estimate and August roadside survey is unusual and could have been caused by poor survey conditions or natural variation in the data sets. The pheasant population is well below levels observed in 2007 (11.9 million) when 1.5 million acres of Conservation Reserve Program (CRP) Grasslands were available to nesting pheasants. Current CRP acreage is slightly below 1 million acres.

**SD Deer Collaring Effort**

Annual rates of change within a deer population are influenced primarily by adult survival and the number of fawns that reach one year of age. Thus, the primary objective of these efforts is to estimate annual survival rates of whitetail and mule deer adults, juveniles, and fawns occupying agricultural, prairie and forested landscapes throughout South Dakota. These data were used to model deer populations and rates of change, and ultimately assisted GFP staff and the Commission in developing the 2017-18 deer season structure. In 2016, survival monitoring for white-tailed deer was conducted in 5 study areas – Grand River, Black Hills, Upper James River, Prairie Coteau, and Big Sioux River. White-tailed deer survival rates varied depending on study area and age class, and were documented as follows: adult males (n=108) ranged from 56-62%, adult females (n=410) ranged from 69-84%, juveniles (n=234) ranged from 60-83%, and fawns (n=176) ranged from 64-76%. Survival monitoring for mule deer was conducted in 4 study areas – Black Hills, White River, Belle Fourche River, and Upper Missouri River. Survival estimates for mule deer were documented as follows: adult females (n=369) ranged from 80-88%, juveniles (n=173) ranged from 56-89%, and fawns (n=171) ranged from 55-66%.

Adult and juvenile deer were again captured and radio-collared in the winter of 2017 in order to supplement sample sizes/replace mortalities. In addition, one white-tailed deer survival monitoring study area was added (Lower James River). Overall, winter captures added 570 radio-collared deer to the survival monitoring efforts across the state. Furthermore, approximately 400 fawns will be capture in early summer of 2017.

**Private Lands Habitat Program Summary**

 From the multitude of wildlife species dependent upon its diverse landscapes to its world-famous pheasant hunting, South Dakota’s natural resources contribute greatly to our overall quality of life. With approximately 80% of South Dakota’s land area in private ownership, farmers, ranchers, and landowners continue to be the most influential habitat stewards for resident and migratory wildlife populations.

 South Dakota Game, Fish & Parks (SDGFP) recognizes landowners as an essential partner in ensuring we meet our agency’s responsibility of managing South Dakota’s fish and wildlife trust resources. Wildlife management not only involves biological and science-based habitat management practices, but also gives careful consideration to the wide array of social values held by the public and South Dakota landowners.

 SDGFP offers a variety of voluntary habitat incentives to landowners though the Private Lands Habitat Program. The principal objective of the program is to provide cost-share incentives to cooperating landowners who establish wildlife habitat on their lands, thereby helping to sustain and enhance local wildlife populations. These habitat incentives are designed to (1) meet the biological needs of a variety of resident and migratory wildlife species, (2) complement conservation program opportunities offered through the federal Farm Bill, and (3) meet the needs and desires of private landowners seeking to restore, protect, and enhance wildlife habitat on their lands.

 Improved wildlife habitat and healthy wildlife populations resulting from successful program implementation and delivery also provides opportunities for countless hours of consumptive and non-consumptive wildlife related recreation activities to many South Dakotans and visitors to the state. Landowners cooperating with SDGFP through these programs agreed to open their lands to reasonable use by the public. The following specific habitat practices are offered through the Private Lands Habitat Program:

Wildlife Habitat Fencing - This practice involves using exclusionary fences to protect and enhance existing wildlife habitat such as woody cover plantings and nesting cover from livestock grazing.

Grassland Habitat Enhancements - This practice involves reestablishing grassland vegetation on previously farmed areas as nesting, brood rearing, foraging, and winter cover for wildlife. Plantings involve either a dense nesting cover mixture of alfalfa, sweet clover, and wheatgrasses; or a mixture of native warm and cool season grasses and native forbs. Grassland habitat restoration activities on previously cropped land have also become a widely utilized practice by cooperators who are reseeding marginal cropland areas back to grass as part of managed grazing systems. Grassland habitat enhancements also include cost-sharing development of infrastructure (e.g. cross fences) as part of managed livestock grazing systems to protect and enhance wildlife habitat and better manage livestock grazing to benefit grassland dependent wildlife, with a special emphasis placed on riparian areas and large tracts of intact native rangelands. Additionally, cost-share is provided to replace woven wire fence on managed grazing systems with three- and four-wire wildlife-friendly design fences in western South Dakota’s pronghorn range.

Woody Habitat Establishments - This practice involves planting woody cover plots to benefit resident small and big game species. Eligible practices included costs incurred for plant materials (trees & shrubs), actual planting costs, and weed barrier fabric and installation.

Small Game Food Plots - This practice involves planting and maintaining annual food habitat plots to benefit resident small game species.

Wetland Restoration and Enhancement - This practice involves restoring, enhancing, or creating wetland habitat to benefit myriad migratory and resident wildlife species.

In 2016, SDGFP accomplished the following through its Private Lands Habitat Program:

|  |  |  |  |
| --- | --- | --- | --- |
| Management Practice | Cooperators | Acres | GFP Expenditures |
| Wildlife Habitat Fencing | 21 | 209 | $34,943 |
| Grassland Enhancements | 174 | 43,055 | $810,914 |
| Woody Cover Establishments | 47 | 154 | $224,596 |
| Small Game Food Plots | 836 | 9,517 | $212,335 |
| Wetland Restoration/Enhancement | 26 | 202.9 | $115,461 |

**TB Surveillance**

In March of 2017, a cattle herd in northwestern South Dakota was confirmed with bovine tuberculosis (TB). South Dakota Game, Fish and Parks (SDGFP) worked closely with South Dakota Animal Industry Board (SDAIB) to implement a wildlife surveillance plan to assist in the monitoring of this TB incident and to determine if wildlife within the affected area have been exposed or carrying the disease. The objective is to implement a surveillance program which will consist of both a short-term and long-term surveillance effort.

A public meeting was held on March 23rd, 2017 at the high school in Buffalo, South Dakota, to present a wildlife surveillance plan to the landowners and producers of Harding County in response to the recent discovery of bovine tuberculosis (TB) in cattle. Approximately 100 members of the public attended the meeting and many more watched the presentation over a live video stream feed. SDGFP staff members from SDGFP and the South Dakota Animal Industry Board were present and answered many questions.

On March 27, 2017, SDGFP initiated its short-term wildlife surveillance effort. A “field laboratory” was established at the U.S. Forest Service Office in Camp Crook, South Dakota and a small sampling of wildlife was taken to test the processes. A U.S. Department of Agriculture-Animal and Plant Health Inspection Service (USDA-APHIS) fixed-wing aircraft conducted flights and removed 11 coyotes for testing. SDGFP staff conducted removal of wildlife from the ground and sampled 15 pronghorn, 11 mule deer, and 2 raccoon for TB testing. The goal of working through the collection and sampling process and streamlining the laboratory protocol was successful. All samples collected from this day’s activities were shipped to the USDA-APHIS National Veterinary Services Laboratories in Ames, Iowa for testing.

Aerial removal of mule deer, white-tailed deer, and pronghorn was conducted from March 28-29, 2017, with a contracted helicopter on areas within the sampling area where landowner permission has been obtained. Evaluation of any further short-term wildlife surveillance for TB will be conducted once laboratory test results have been received in approximately 6-8 weeks. All salvageable deer and pronghorn removed from this surveillance effort will be processed and stored until test results become available. In total 111 deer, 42 pronghorn antelope, 37 coyotes, and 9 raccoon were removed and samples submitted.

**Online Breeding Bird Atlas**

A breeding bird atlas is an effort to determine the distribution of all breeding bird species and their general habitat needs in a specific area, such as a state. The sample unit is called a breeding bird atlas block. SDGFP funded and helped coordinate, with the Bird Conservancy of the Rockies, the second statewide South Dakota Breeding Bird Atlas. Project highlights included 252 species recorded, 239 species confirmed breeding, 13 new species confirmed during the second atlas, and an average of 57 species per atlas block.

SDGFP is finishing work on an interactive website to allow the public to view and analyze atlas results. Users can explore the 433 atlas survey blocks or any of the species documented during the project. A user may locate a block from a dropdown county list or from a statewide map. Once a block is selected, the user can view the summary report to see species and their confirmation level and block effort (number of visits and hours spent on that block). Users can also view species accounts. Each account includes background information (distribution, habitat, breeding biology), high-quality photos, an atlas map sorted by breeding status, and a comparison map between the first and second atlases. Users can also view, download or print a standalone species account. Another option is to view the habitat types for all observations to learn where breeding records were found for each species. Additional report options within the species portion of the website are a species’ block summary, a statewide summary for the selected species, and a statewide summary for all species.

The design and testing of such a tool is complex and time-consuming. SDGFP plans for the website to be available to the public during the summer of 2017.