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To: Gunnison Basin Sage-grouse Strategic Committee Members

From: Rebecca Ricord, Administrative Assistant III

Date: July 15, 2021

**Included in your packet for the Wildlife Conservation Strategic
Committee Meeting:**

July 21, 2021 Agenda

Draft of April 21, 2021 Minutes

Waunita Watchable Wildlife 2021 Final Report

GUNNISON BASIN SAGE-GROUSE STRATEGIC COMMITTEE
REGULAR MEETING AGENDA

DATE: Wednesday, July 21, 2021

PLACE: Planning Commission Meeting Room, Blackstock Government Center OR
Zoom meeting, Meeting ID: 984 7282 0644 (see Teleconference Information below)

1. 10:00am
 - Call Regular Meeting to Order; Determination of Quorum; Verify Public Notice of Meeting
 - Agenda Approval
 - Approval of April 21, 2021 Meeting Minutes
2. 10:05
 - Committee Member Comments/Reports
3. 10:30
 - Committee and Subcommittee Membership Review
4. 10:50
 - Vote for Chair, Vice-Chair, and Secretary
5. 11:10
 - Lek Count Update
6. 11:25
 - Waunita Lek Count Update
8. 11:40
 - GB-SEA Cheatgrass Pull Day Summary
9. 11:50
 - Streamlined Building Sites Discussion
10. 11:55
 - Public Comments
11. 12:00pm
 - Future Meeting
12. 12:05
 - Adjourn

NOTE: This agenda is subject to change, including the addition of items up to 24 hours in advance or the deletion of items at any time. All times are approximate. Regular Meetings, Public Hearings, and Special Meetings are recorded and **ACTION MAY BE TAKEN ON ANY ITEM**. Work Sessions are not recorded and formal action cannot be taken. Two or more Gunnison County Commissioners may attend this meeting. For further information, contact the County Administration at 641-0248. If special accommodations are necessary per ADA, contact 641-0248 or TTY 641-3061 prior to the meeting.

Teleconference Information:

Zoom meeting, Meeting ID: 984 7282 0644

Passcode: 432130

<https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fzoom.us%2Fj%2F98472820644%3Fpwd%3DcGRqTlIGb3FsZ1U5T0ZPVTFHWZwQT09&data=04%7C01%7C%7C2a9f77912d0d4f08835808d94088e832%7Ced5b36e701ee4ebc867ee03cfa0d4697%7C0%7C0%7C637611779025315968%7CUnknwn%7CTWFpbGZsb3d8eyJWljoimC4wLjAwMDAiLCJQIjoiV2luMzliLCJBTiI6Ik1haWwiLCJXVCi6Mn0%3D%7C1000&sdata=MI7SvTIwtdz4eRTUeegGW%2FEMnmAjE7RidqeQzBP%2B%2Fvc%3D&reserved=0>

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**GUNNISON BASIN SAGE-GROUSE STRATEGIC COMMITTEE
REGULAR MEETING MINUTES
April 21, 2021**

The April 21, 2021 Gunnison Basin Sage-grouse Strategic Committee meeting was conducted by Zoom virtual online meeting, Gunnison, CO, 81230

Committee Members Present:

Voting Members:

Jonathan Houck, Chairperson, Gunnison County Board of County Commissioners (BOCC)
Greg Peterson, Secretary, Gunnison County Stockgrowers' Association (GCSA)
Peter Caloger, Public At-Large
Tim Kugler, Recreation At-Large
Sue Navy, High Country Conservation Advocates (HCCA)
Matt Vasquez, U.S. Forest Service (USFS)
Kathy Brodhead, Bureau of Land Management (BLM) Alternate
Brandon Diamond, Colorado Parks and Wildlife (CPW)
Ann Timberman, US Fish & Wildlife Service (UFWS)
Dan Olson, Natural Resources Conservation Service (NRCS)

Non-Voting Members

Nate Seward, Colorado Parks and Wildlife (CPW) Alternate
Matt Reed, High Country Conservation Advocates (HCCA)

Others in the Audience:

Leah Waldner, BLM
John Scott, Scott Resource Management Services
Dayle Funka, USFS
Pat Magee, Western Colorado University
Marcella Tarantino, Bird Conservancy of the Rockies

Staff Members Present:

Aleshia Rummel, Gunnison Conservation District, Wildlife Biologist
Rebecca Ricord, Gunnison County Community Development

Others present as listed in text.

CALL TO ORDER: Chairperson Houck called the April 21, 2021 meeting of the Gunnison Basin Sage-grouse Strategic Committee to order at 10:02 A.M.

DETERMINATION OF QUORUM: Houck confirmed that a quorum was present.

AGENDA APPROVAL: Agenda approved as presented.

APPROVAL OF FEBRUARY 17, 2021 MEETING MINUTES: Moved: by Houck and seconded by Navy to approve the February 17, 2021 meeting minutes as presented. Motion carried unanimously.

COMMITTEE MEMBER COMMENTS/REPORTS

Reed stated that they have some projects in line up Ohio Creek and south of Gunnison. Houck reported that if they continue to see positive COVID results projects outside will not have as many roadblocks this year as last year.

Kugler reported that currently in Signal Peak they are still under the sage-grouse closures in the northwest area. Chatting with the BLM, compliance has been good. The rest of the Signal Peak area is still closed to mechanized and motorized use through the end of the month. Trails to the east of the closure are open to

foot. Things are starting to dry out. At Hartman Rocks they have 30 miles of single track that people can go to. He stated that it hasn't been as busy as last year. They are working with the IRE class at Western and have been working on interpretive signage for the Signal Peak trailhead and hope to install it in the next week. They finalized the map for the kiosks at Signal Peak. More and more people are starting to understand the closures in Signal Peak.

Scott reported that the Gunnison Rising Habitat Prioritization Plan is at the national headquarters. It is still in review there. Houck asked what the public comment timeline is. Scott stated it is between 30 and 45 days and then final decision.

Olson stated that the soils update for the Gunnison area have been published. There is some good information regarding sage-grouse habitat. Mentioned that the five-year update for the working lands for wildlife sage-brush biome framework conservation action has been published. IT was shared through an email forwarded from Timberman.

Houck reported that they are putting together a committee for the wolf reintroduction program. Stated that he applied to join the Board. Diamond stated there was tremendous interest, approximately 150 applicants across the state applied and reported they have been evaluating the applicants and believes it will move along quickly in the next couple of weeks. Houck stated that he has had some good conversations with Congressman Joe Negous' office regarding a funding for a modern version of the civil conservation core, to provide funding to put people to work on public lands for habitat conservation. Houck will keep the group up to date and send out an email with more information. Houck reported that that there is going to be another busy year for building permits in the County.

Reed asked if there is a new senior wildlife biologist in Durango, including the Gunnison area and when they will be starting and their background. Diamond stated that they do have a new senior biologist in the southwest region, **Jamond Brigg** and gave his background. They will introduce him to the group.

Houck stated that the CPW had 38 proposals for State Park interests. It is in process now but they haven't heard anything back but will update when they do.

Funka gave the update for the USFS. Stated that litigation is underway. The USFS entered into an agreement with Western to conduct all monitoring criteria that was agreed to from the CCA and BO signed in 2014.

Peterson asked that at the next meeting that they have it in person for the people who would like to join.

COMMITTEE AND SUBCOMMITTEE MEMBERSHIP

Houck plans on reaching out to all of the chairs with the subcommittees regarding updates and memberships over the next couple of months. Then they will hold an election for Chair, Vice- Chair and Secretary and asked everyone to think about whether they would like to take on the positions. Also, interested whether there are other subcommittees that would be needed and whether the current ones are still active and needed. Peterson asked that the committee list be sent out before the next meeting. Reported that Saguache County has appointed Amber Wilson as a regular member.

REVIEW ACTION PLAN

Timberman stated that they have hired someone to start August 1, 2021 for a Gunnison Sage-grouse biologist. They will be helping implement the Gunnison Sage-grouse Recovery plan. She received \$50,000 funding to help with on the ground projects. They put together a grant request through the Bird Conservancy for one million dollars. Hoping to hear on that in wither August or September.

Houck asked if she is asking people if they can help with how to spend the money, projects that it could be used for. Ann stated that yes, they are. If people have ideas she would like a list of projects that are ready to go and ranging in costs and then she could submit them.

Seward stated that Kathy Griffin is working with someone in Denver to get the \$50,000 the mesic restoration work this summer. Navy asked how they are doing on getting any further projects done on private lands. Seward stated they are making progress, met with a larger homeowner in the basin and did some work on their forest service allotment last fall. They were able to go out in the field and look at it and discuss the goals for the property. The owner is interested in having them come out this fall to tour their property and look at it. There are several miles that they can treat and increase the productivity.

Seward asked that the 2009 action plan for the committee be reviewed. Houck will reach out to Jim Cochran to get together with him and go over it also and figure out to update the plan to be more reflective to where they are at now. Discussion followed on the need and it was decided that they will review and update it in the future.

USFWS GUNNISON SAGE-GROUSE RECOVERY PLAN AND CATALYST GROUP MEETING UPDATE

Magee gave a summary of the February 24, 2021 pre-summit event. They are starting to think about the 2022 summit and has a draft agenda to send out for feedback.

MID-SEASON LEK COUNT UPDATE

Seward gave the update. Yesterday, April 20, 2021, was the half way point for the official lek count season. Every year they monitor 82-83 leks in Gunnison Basin, from April 1-May 10. He is cautiously optimistic that they will be up this year compared to the last couple of years. The trend he is seeing is that they are on par with the spring of 2018. The numbers this spring are within one for males and females for the early count this spring. In 2018 their high male count was 627. Hoping to be up in the high 500 low 600 for high male count this year. Has seen seven or eight hens being delivered this year. The count at the Waunita Watchable Site at the end of March on the north meadow was 27 males and 1 female. They don't seem to be using the east ridge as much as in the past. They haven't seen any on the traditional lek. Seward stated that they were able to get on the east side of the ridge and saw some birds.

PUBLIC COMMENTS

None.

FUTURE MEETINGS: Future meetings will occur by Zoom online meetings, unless changed for a specific reason.

5-19-21	10-12	Regular Meeting	Blackstock; 221 N. Wisconsin 2 nd floor meeting room
6-16-21	10-12	Regular Meeting	Blackstock; 221 N. Wisconsin 2 nd floor meeting room
7-21-21	10-12	Regular Meeting	Blackstock; 221 N. Wisconsin 2 nd floor meeting room
8-18-21	10-12	Regular Meeting	Blackstock; 221 N. Wisconsin 2 nd floor meeting room
9-15-21	10-12	Regular Meeting	Blackstock; 221 N. Wisconsin 2 nd floor meeting room
10-20-21	10-12	Regular Meeting	Blackstock; 221 N. Wisconsin 2 nd floor meeting room
11-17-21	10-12	Regular Meeting	Blackstock; 221 N. Wisconsin 2 nd floor meeting room
12-15-21	10-12	Regular Meeting	Blackstock; 221 N. Wisconsin 2 nd floor meeting room

ADJOURN: The April 21, 2021 meeting of the Gunnison Basin Sage-grouse Strategic Committee adjourned at 12:01 PM.

Minutes Prepared By: Rebecca Ricord, Gunnison County Community Development

Gunnison Sage-grouse Watchable Wildlife Program

Waunita Watchable Wildlife Site
2021
Final Report



Bronwyn Taylor and Dr. Patrick Magee!
Sisk-a-dee and Department of Natural and Environmental Sciences
Western Colorado University
Gunnison, CO 81231

2 June 2021

Gunnison Sage-grouse Watchable Wildlife Program Waunita Lek Viewing 2021 Summary

Site Statistics at a Glance

Volunteer Effort

1 supervisor, 1 coordinator and 8 volunteers
 54 hours of volunteer training; 185 volunteer hours at the site
 259 hours of coordination by Western Colorado University student and alumni
 50 hours of supervision and program implementation
Total volunteer commitment 548 hours (equivalent to an employee working 13.7 40-hr weeks)

Human visitation

Season dates	1-30 April CPW dates (30 days)
Sisk-a-dee/Western monitoring dates	April 1 – May 5 (35 days)
Closed dates	Closed before 1 April, closed after 30 April, mid-season closure 11-17 April
Total open days	23
Total Visitors	246 (43 volunteers)
Total true visitors (total minus volunteers)	203 (79%)
Average true visitors per open days only	203/23 = 8.8
Days with at least one visitor on opens days	22/23 (96%)
Total number of vehicles (not including closed days)	113 (23 volunteer vehicles)
Total true visitor vehicles	90
Average true visitor vehicles per day open days only	90/23 = 3.9
Vehicles violated protocol	30 out of 113 (27%)

Estimated dollars spent in Gunnison by 203 visitors \$96,203.70

\$ 15,037.44 was spent for food, lodging and other expenses spent in Gunnison.

In addition, visitors spent **\$15,292.79** on transportation. These expenditures were partially spent in Gunnison County, but many were spent on gas and possibly airline travel purchased outside of Gunnison. The combined total from food, lodging, other expenses, and transportation costs, yields an average expense per visitor of \$473.90.

Gunnison Sage-grouse lek counts

High Male Count (4/10/21)	38
High Female Count (5/4/21)	8
High Male and Female Count (4/10/19)	45
Total high count of all birds (gender unspecified) (4/19/21)	56
Days grouse present at any of three lek locations (including closed days 1 April -5 May)	31/35
Days grouse present at any of three lek locations (not including closed days)	23/23

Gunnison Sage-grouse Lek distribution

Main Lek: 0 grouse were observed on the main lek during 2021
 North Meadow: 750 grouse (or grouse days) were observed on 31 out of 35 days, average of 24.2/day; the high male count was 35 on 4/10/21
 East Ridge: 200 grouse (or grouse days) observed on 28 out of 35 days, average of 7.1/day; the high male count was 18 on 4/15/21.

Gunnison Sage-grouse activity on the east side of Waunita's East Ridge (Monson Gulch lek counts)

Tasha Blecha counted the lek area from the Monson Gulch location (east side of the East Ridge) on 15 April 2021. Her total male count was 45. She counted 27 males on the East Ridge lek and 18 lower on the eastern slope that is not visible from our traditional viewing location at the Waunita Watchable Wildlife Site.

Watchable Wildlife Site Management

The new Waunita Watchable Wildlife regulations passed by the Colorado Wildlife Commission went into effect in 2021. Per these new regulations, the site was closed prior to April 1 and after April 30. During April, a mid-season closure occurred from 11-17 April. Volunteers monitored the site during the closed dates in April and until 5 May 2021. The site was open for grouse viewing on a total of 23 days. The new regulations were advertised at www.siskadee.org.

Volunteers monitored the site every day from 1 April to 5 May, arriving 1.5 hours before sunrise and staying until ~8 am. On closed dates from 11-17 April volunteers monitored the site but parked approximately 100 m below the parking area on the side of County Road 887. During the post-season closure dates (1-5 May), volunteers parked at the viewing area. During all closed dates, volunteers set a sign outside their car that indicated the site was closed.

From 1 April – 5 May, CPW installed a camera at the watchable wildlife site parking area to assess compliance of site closure. District Wildlife Manager Nick Gallowich reported that no violations were recorded on the camera.

Gunnison County continued to manage County Road 887 by installing “No Parking” signs along the country road north of the viewing site. The intent was to discourage visitors from observing grouse at locations other than the established parking lot. We did not observe any law enforcement presence at the site on dates volunteers were present. We do not have information from the sheriff's office, CPW or USFWS whether anyone patrolled the Waunita site in 2021.

In 2021, CPW required all visitors to State Wildlife Areas to have a valid Colorado hunting or fishing license. All commercial groups continued to pay the \$100 use fee to Sisk-a-dee.

No Viewing Days

Of the 7 no viewing days during the season, when volunteers were parked on the county road, only one vehicle with two visitors arrived intending to go to the site, on 11 April. When it was explained to them that the site was closed, they were understanding and turned around. Later in the season, the same two visitors returned and were able to view the birds. During this period, a total of 15 cars drove past the Watchable Wildlife Site on the county road. The majority of these vehicles belonged to locals and they did not stop to talk to the volunteer and drove by the site.

A couple vehicles attempted to visit the site after it was closed for the season. On 1 May, two vehicles drove past the site and proceeded to view the birds along County Road 887. One of these vehicles stopped and spoke with a volunteer, and one did not. Signs indicating the closure and county road parking restrictions were visible to passing traffic. These incidences were reported to local District Wildlife Manager Nick Gallowich, although no citations have been given and the incidents are still under investigation. No grouse were visible at the lek during these incidents.



Executive Summary

Western Colorado University (Western) and Sisk-a-dee worked with Colorado Parks and Wildlife (CPW) to deliver the Gunnison Sage-grouse Watchable Wildlife Program in spring 2021. Other partners included Gunnison County and the Gunnison Basin Sage-grouse Strategic Committee. The program includes four major goals, that were only partly accomplished due to COVID-19. First, we provided opportunities for individuals and groups to view the Gunnison Sage-grouse, including commercial grouse viewing. We did not have the viewing trailer in place in 2021 and while we had numerous reservations from commercial viewing tour groups, this site use was mostly negated during the continuing pandemic. However, we did allow commercial groups who had previously made reservations to visit the site and view from their vehicles. Our second goal of promoting education regarding the conservation of the Gunnison Sage-grouse through free evening slide programs was not done in 2021 due to COVID-19. We did allow lek observations open to the public at the viewing site parking area. Third, the Waunita Watchable Wildlife Site was monitored by volunteers to encourage visitors to adhere to the viewing protocol and to provide guidance to visitors. Fourth, data were collected concerning human visitation to the Watchable Wildlife Site, as well as grouse abundance and behavior, to determine the impacts of viewing on grouse. The count data were used by CPW for their annual Gunnison Sage-grouse population monitoring effort. Bronwyn Taylor served as the 2021 coordinator from Western for the monitoring effort, and also prepared the draft final report. Alex Fortney continued to manage the reservations by commercial groups and she helped with other logistics.

Volunteer Effort

Eleven volunteers monitored the Waunita Watchable Wildlife Site from 1 April to 5 May on the 23 days that the site was open for viewing. Volunteers spent 43 volunteer days of roughly **185 hours** monitoring Gunnison sage-grouse, plus 20 days of **54 hours in training**. The first training day was facilitated by Pat Magee, Bronwyn Taylor, and Nick Gallowich and was held at Western Colorado University on 24 March 2021. Volunteers learned about Gunnison Sage-grouse ecology, the history of the watchable wildlife program at Waunita, and their role as volunteers. Each volunteer received a packet of information that included data sheets and we reviewed the data collection protocols. The second training day was a field day. Volunteers met at 4:40 am on 28 March 2021 and carpooled to the Waunita Watchable Wildlife Site. Volunteers learned to locate and identify Gunnison Sage-grouse and learned to determine gender. They also learned how to conduct lek counts at the three sub-lek locations. They also were trained on methods to conduct human visitation monitoring. In addition to the volunteer hours associated with lek activities, Bronwyn Taylor invested approximately **84 hours** coordinating and training volunteers, managing and analyzing data, writing a daily blog, and supervising volunteers, and preparing the final report for the Watchable Wildlife Program. Alexandra Fortney invested approximately **175 hours** updating documents and coordinating commercial and private group visits through email and phone correspondence, scheduling, and education on protocol. Pat Magee expended approximately **50 hours** on supervision and training, communicating with the public (Sisk-a-dee inquiries), maintaining the Siskadee.org webpage, and reviewing and revising the final report. **A total of 548 volunteer hours** were contributed to the Gunnison Sage-grouse Watchable Wildlife Program in 2021.

Visitation

True visitors (not volunteers affiliated with Sisk-a-dee, CPW and Western) were present on 22 of the 23 days the site was open to the public for viewing (96% of viewing days). Including the volunteers, 246 people visited the lek in 2021. Of the 246 total visitors, 43 were volunteers and **203 were true visitors**. On average, 8.8 true visitors were present at the site per day (23 days). Visitors came from **22 U.S. states and 1 foreign country**.

A total of 113 vehicles were present at the Waunita Watchable Wildlife Site in 2021. Volunteers accounted for 23 of the vehicles, leaving **90 true visitor vehicles**. The highest total vehicle count was 8 on 25 April and the highest number of true visitor vehicles was 7 on 25 April. The average true visitor vehicles present per day at the Watchable Wildlife Site was 3.9 (23 open days).

The viewing trailer was not available in 2021 due to COVID-19 restrictions, so all visitors viewed in their vehicles from the parking lot. A total of 13 commercial groups reserved the trailer in 2021 along with 4 private individuals (small private groups). Despite not having the viewing trailer, four commercial groups and four private groups maintained their reservations and visited the Waunita lek. We allowed commercial groups with existing reservations to visit the site in two vans, one van and two cars, or four cars. They were required to stay in their vehicles and also pay the commercial viewing fee. The commercial and private groups that acquired reservations under Sisk-a-dee's commercial use permit were not required to have fishing or hunting licenses, all other visitors were required to purchase valid licenses. No law enforcement was conducted to check compliance with the new fishing/hunting license requirement.

Economic Impact

The economic impact of Gunnison Sage-grouse viewing was estimated by handing out surveys to visitors in the morning and either collecting the surveys before the visitors departed, or receiving surveys that were mailed back to Sisk-a-dee. A total of 64 true visitors filled out the surveys. These individuals spent \$30,330.23 for lodging, food, gas and other expenses while visiting the Gunnison area or traveling to Gunnison. The average spent per individual was \$473.91. This average, multiplied by 203, the number total true visitors, the estimated total spent by all visitors was **\$96,203.70**.

Gunnison Sage-grouse Activity

Gunnison Sage-grouse were present at the Waunita lek on 31 out of 35 mornings (89% of monitored dates). We did not observe any grouse using the Main Lek during the viewing season. The **high count for males was 38** on 10 April and the high count for females was 8 on 4 May. The high count of males and females was 45 on 10 April; and the high count including individuals of unknown gender was 56 on 19 April.

The 2019 monitoring plan for the Waunita Watchable Wildlife Site, as developed by the Watchable Wildlife Sub-committee of the Gunnison Basin Sage-grouse Strategic Committee, called for grouse counting on the east side of the East Ridge lek area location at Waunita. Counts were made on this side of the ridge in 2018. These counts are desirable because sage-grouse using the lek on the ridge move around and easily become out of view of the volunteer counters (and the visiting public) when they move below the ridge line. In 2019, CPW attempted to secure access from a private landowner to drive into the lek count location, but the non-local landowner could not be reached so access was not obtained. As a result, no counts were conducted on the Monson Gulch side in 2019. In 2020, no counts were attempted during the pandemic. In 2021, CPW counted 45 total grouse in the Monson Gulch area on 15 April.

Visitor Compliance with Site Protocols

Of the 113 total vehicles, 83 (73%) followed the protocol listed on the Sisk-a-dee website. The remaining 30 vehicles, or **27% of visitors violated the protocol in some way**. Of the true visitors (90 vehicles), 66% followed protocols. Of the 81 private vehicles, 27 (33%) committed protocol violations. Of the 9 tour vehicles, 3 (33%) committed protocol violations. Protocol violations included making noises from vehicles, talking above a whisper, slamming car doors, using the bathroom and/or exiting vehicles prior to viewing end time, arriving late or leaving early. Only 1 protocol violation (vehicle high beams) coincided with a flushing event. Most of the protocol violations at the viewing area apparently did not result in a known sage-grouse disturbance, and this is potentially because the grouse display and congregate nearly 1 km from the viewing area.

Causes of flush events were typically unknown and it is unclear if they were associated with disturbance or a part of inter-lek area movement. Of the 39 grouse flush events recorded from grouse on the 31 days of the 35 monitored days that grouse were present at the lek, they flushed before sunrise 54% of the time and after sunrise 46% of the time. Visitor disturbances to the lek were recorded for one (3%) of these flush events and passing traffic from non-visitors for 9 (23%) of these flush events. For the rest of 26 (67%) observed flush events, no disturbances were observed correlating. Three (8%) of these flush events were observed to have been potentially caused by coyotes. On many of the days, coyotes were present at the leks and a total of 25 observations were made, although only 12 % of the time (3 out of 25), did they correlate with grouse flushing.

At the end of the 2015 lek viewing season, the decision was made to close the viewing area to the public and commercial groups two times per week to minimize human disturbance to the grouse. In 2021 the lek was closed for 7 consecutive days from 11-17 April. The [siskadee.org](http://www.siskadee.org) web page advertised the closure dates. During these no viewing days, the volunteers park along county road 887 about 100 m below the watchable Wildlife Site. From this vantage point, the lek and Watchable Wildlife Site Parking area were visible and counts were made on these days.

Of the 7 no viewing days during the season, when volunteers were parked on the county road, only one vehicle with two visitors arrived intending to go to the site, on 11 April. When explained to them that the site was closed, they were understanding and turned around. Later in the season, the two visitors returned and were able to view the birds. During the five post-viewing season days when the site was closed, on 1 May, two vehicles drove passed the site and proceeded to view the birds along County Road 887. On this day, a sign indicating the closure was visible to passing traffic. The first incident lasted from 0612 – 0631. During this time a vehicle stopped at the site and the volunteer notified them that the site was closed and gathered information, but they proceeded to drive up the road and park further up the county road, about adjacent to the North Meadow. They got out of their vehicles (carelessly opening and closing their doors), and attempted to view the grouse. They were parked for over 9 minutes along the county road. During the second incident, the vehicle never stopped at the site, but drove up the road early in the morning when light was still low (time not logged). On their way down, they stopped in approximately the same location as the first vehicle and left their vehicle from 0721 to 0724 to attempt to view the birds. These incidences were reported to local CPW officer Nick Gallowich, although no citations have been given and the incidents are still under investigation. No grouse were visible at the lek during these incidents.

Visitor communications included the www.siskadee.org website, Alexandra Fortney's contact via phone and email for purposes of reserving the viewing trailer, Pat Magee's contact via phone, text and e-mail for visitors planning their trips and inquiring about site protocols, grouse numbers and behaviors, directions, lodging, other birding opportunities and more, and Bronwyn Taylor's email and phone for groups and volunteers. Bronwyn also maintained the Sisk-a-dee blog (<http://gunnisagegrouse.blogspot.com/>). Communications via phone, text and e-mail with commercial groups and private birders occurred on a daily basis. The webpage provides background information on watchable wildlife opportunities, viewing protocols, sunrise times, closure dates, and contact for further information (Patrick Magee's contact). The blog included daily updates of grouse counts and notes on behavior, wildlife sightings, significant weather, specific locations of observed grouse, and reminders of closed viewing days.

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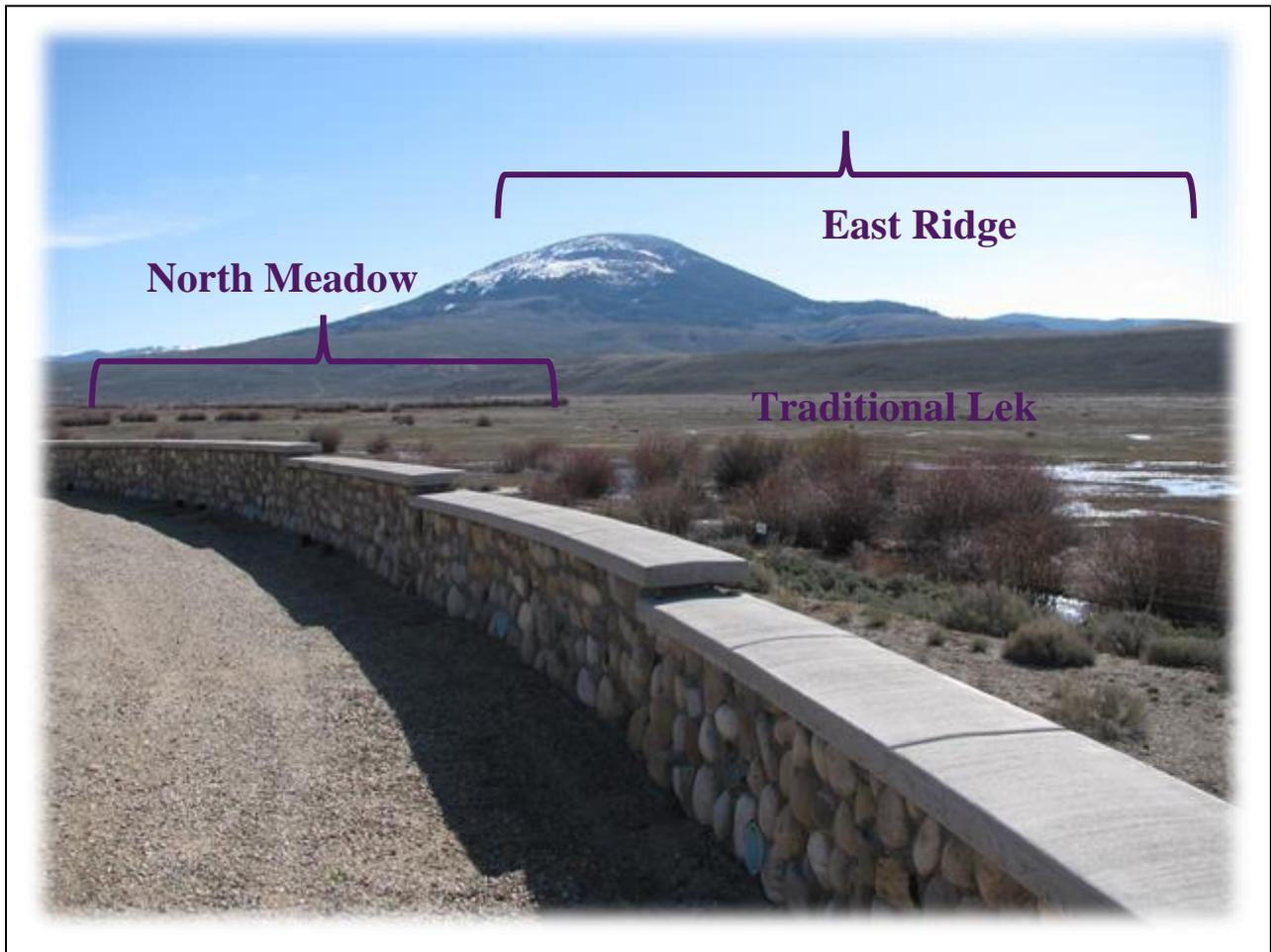
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Orientation to the Waunita Site

Gunnison Sage-grouse Waunita Watchable Wildlife Site 2021 Program Summary

Located 19 miles east of Gunnison along County Road 887, the viewing area is owned by Colorado Parks and Wildlife and includes a viewing trailer, a parking area, and a portable outhouse. The site is open seasonally from 1-30 April and monitored annually from 1 April to 5 May. Gunnison Sage-grouse conduct their mating ritual to the east on private land owned by the Double Heart Ranch. The land has a conservation easement in place to protect the Gunnison Sage-grouse. The site has been operated by CPW since 1999 and is the only public viewing site for Gunnison Sage-grouse in the Gunnison Basin which holds approximately 87% of the global population of the bird. The grouse historically displayed at the Main Lek but most activity now is in the North Meadow or on the East Ridge.



Program Effort

Eleven volunteers representing CPW, Sisk-a-dee, and Western Colorado University (Western), monitored the Waunita Watchable Wildlife Site during the 2021 Season. Nine were Western students, 1 was a Western alumni, and 1 was a Western faculty member.

Volunteers monitored grouse numbers and human visitation every day during a 35-day period in the 2021 Gunnison Sage-grouse viewing season. Two training days occurred on 3/24/2021 and 3/28/2021. The

first official day of monitoring was 4/1/2021 and the last day of monitoring was 5/05/2021. The site was open for 23 days of this period.

Volunteers monitored the Watchable Wildlife site from the parking lot for all 23 days that the site was open and were present on the County Road for the 7 mid-season closed dates and at the site for the 5 post-season closed dates. Volunteers monitored the lek from their vehicles during open and closed dates. Including training, a total of 63 volunteer days (20 of these volunteer days were spent training) and 185 volunteer hours were recorded at the Waunita Watchable Wildlife Site in 2021. The first training was held the evening of 24 March at Western Colorado University. Training was lasted about 1.5 hours and was conducted by Dr. Patrick Magee of Western and Nick Gallowich, District Wildlife Manager (CPW). Volunteers learned about Gunnison sage-grouse ecology, natural history and conservation status, including viewing a video of the lek displays. Further, they learned about the history and the purpose of the Gunnison Sage-grouse Watchable Wildlife Program. The initial evening training session was followed by a morning visitation to the lek on 28 March, lasting 4.5 hrs. Volunteers learned how to identify male and female grouse, where to look for birds and how to properly record their numbers and other observations in the data sheets. Volunteers contributed 53.5 hours to training.

Western volunteer and Gunnison Sage-grouse Watchable Wildlife Program Coordinator Bronwyn Taylor contributed approximately 84 hours. Alexandra Fortney contributed 175 hours working with group leaders to organize trips and making reservations for all commercial, private and nonprofit groups and updated documents. Patrick Magee contributed an additional 50 hours in communication with public and commercial groups, presentations, web design, coordination, and reporting. In total 548 volunteer hours were contributed to the Waunita Watchable Wildlife Program in 2021, this equates to one individual working a 13.7 40-hour work weeks.

Volunteers were acknowledged on 2 May 2021 at Gunnison Pizza Company Restaurant and treated to dinner and were given thank you gifts. CPW funded the dinner, Sisk-a-dee funded the drinks and gifts.

No education programs were held for the general public due to COVID-19 restrictions.

2021 Volunteers

Name	E-mail	Phone Number
Heather Reynolds	heather.reynolds@western.edu	(435)-640-6897
Grant Campbell	grant.campbell@western.edu	(720)-499-6051
Courtney King	courtney.king@western.edu	(518)-369-3842
Katheryn Kellogg	katheryn.kellogg@western.edu	(720)-989-4096
Jace Cussins	jace.cussins@western.edu	(307)-286-8697
Emma McClure	emma.mcclure@western.edu	(206)-271-4352
Petar Simic	petar.simic@western.edu	(248)-881-6982
Annate'a Saylor	annatea.saylor@western.edu	(720)-379-5717
Bronwyn Taylor	bronwyn.taylor@western.edu	(575)-779-6285
Alexandra Fortney	alexandra.fortney@westernalum.org	(970)-946-9367
Patrick Magee!	pmagee@western.edu	(970)-641-3959

Visitation

Rate of visitation

Visitors used the viewing site on 22 of 35 days (63% of the days) from 1 April to 5 May. The site was closed on 12 of those days. Site use on open days was 22 days of 23 days (96% of the days).

Total number of visitors and vehicles

Visitors

Total visitors (not including training day, including volunteers on closed days): 246

Total true visitors (total minus volunteers): 203 (83%)

Total number of true visitors viewing from trailer: NA

Total number of true visitors viewing from parking lot: 203 (100% of true visitors)

Total number of volunteers on site: 43(17% of total visitors)

Average visitors per open days only: $246/23 = 10.7$

Average true visitors per open days only: $203 /23 = 8.5$

Vehicles

Total number of vehicles: 113

Total number of private vehicles in parking lot: 81

Total number of tour vehicles: 9

Total number of volunteer vehicles (not including closed dates/ training): 23

Total number of vehicles belonging to true visitors: 90

High vehicle count: 8 on 25 April

High true visitor vehicle count: 7 on 25 April

Average number of true visitor vehicles per open days only: $90/23 = 3.91$

Visitor Geography

Total number of U.S. states represented: 22

Total number of countries represented outside the U.S: 1

U.S States		Countries and Provinces
Arizona	New Mexico	United Kingdom
Arkansas	New York	United States
California	Ohio	
Colorado	Pennsylvania	
Georgia	South Carolina	
Florida	South Dakota	
Michigan	Texas	
Minnesota	Tennessee	
Missouri	Wisconsin	
Montana	Wyoming	
New Jersey	Washington	

Group Use of Viewing Trailer

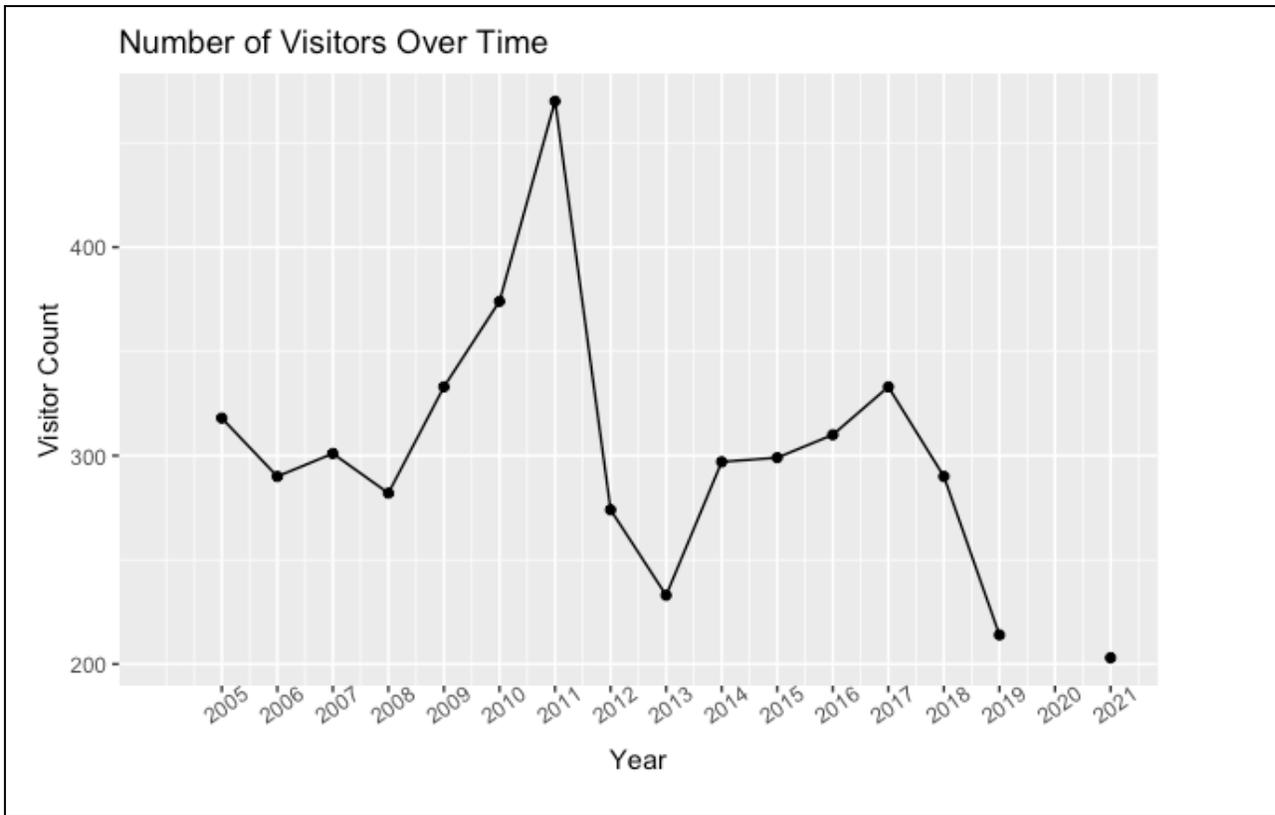
Due to COVID-19 restrictions, there was no Waunita Watchable Wildlife Site trailer for the viewing season of 2021. Instead, visitors viewed from their vehicles.

2021 Waunita Watchable Wildlife Site Gunnison Sage-grouse Viewers
(Shaded cells represent days when lek viewing was closed to the public)

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
03/21	03/22	03/24	03/24 Volunteer Training Day at Hurst 10 volunteers	03/25	03/26	03/27
03/28 Volunteer Training Day 9 volunteers	03/29	03/30	03/31	04/01 7 total visitors 7 private AZ/CO/WA/ United Kingdom 1 volunteer	04/02 11 total visitors 7 private 4 commercial AR/CO/WY 1 volunteer	04/03 8 total visitors 8 private CO/NM 1 volunteer
04/04 12 total visitors 12 private CO/NM/TX/ WI 3 volunteers	04/05 0 visitors 1 volunteer	04/06 19 total visitors 3 private 16 commercial SC/FL/unknown 1 volunteer	04/07 17 total visitors 5 private 12 commercial MI/NM/SD/FL/ NJ/CO 2 volunteers	04/08 7 total visitors 7 private AZ/CA/CO/ NM 1 volunteer	04/09 16 total visitors 9 private 7 commercial CO/MN/NY/ unknown 1 volunteer	04/10 9 total visitors 9 private CA/CO/NJ/ WA 1 volunteer
04/11 2 volunteers	04/12 1 volunteer	04/13 1 volunteer	04/14 2 volunteers	04/15 1 volunteer	04/16 1 volunteer	04/17 1 volunteer
04/18 15 total visitors 15 private CA/CO/PA 2 volunteers	04/19 9 total visitors 9 private CA/CO/NY 1 volunteer	04/20 4 total visitors 4 private CA/AZ 1 volunteer	04/21 1 total visitor 1 private CA 2 volunteers	04/22 1 total visitor 1 private TX 2 volunteers	04/23 7 total visitors 7 private CA/CO/AZ/OH 1 volunteer	04/24 6 total isitors 6 private MN/NY/TN 1 volunteer
04/25 15 total visitors 15 private CO 1 volunteer	04/26 3 total visitors 3 private CO 1 volunteer	04/27 14 total visitors 14 private AZ/CO/FL/GA/ TX 1 volunteer	04/28 1 total visitor 1 private MO 1 volunteer	04/29 1 total visitor 1 private MO 1 volunteer	04/30 20 total visitors 6 private 14 commercial CO/MN/MT/OH /TX/unknown 1 volunteer	05/01 1 volunteer
05/02 2 volunteers	05/03 1 volunteer	05/04 1 volunteer	05/05 1 volunteer			

Number of Open Days and Visitor/ Vehicle Counts

Year	Number of Open Days	Number of True Visitors	Number of True Vehicles
2004	30		
2005	40	318	102
2006	37	290	85
2007	40	301	97
2008	40	282	80
2009	40	333	109
2010	40	374	115
2011	40	470	140
2012	40	274	98
2013	40	233	118
2014	40	297	75
2015	40	299	91
2016	40	310	93
2017	40	333	93
2018	28	290	98
2019	26	214	70
2020	NA	NA	NA
2021	23	203	90



Type of Group	Group Name	Number of Uses
Non-Profits/Education	NA	NA
Commercial	High Lonesome Bird Tours	2
	Seven Ponds Nature Center	*cancelled
	She Flew Birding Tours	*cancelled
	WINGS Birding Tours	1
	Wild Wings	*cancelled
	VENT	*cancelled
	Wildside Nature Tours	*cancelled
	Zeiss Birding	*cancelled
	Partnership for International Birding	1
	Tropical Birding	1
Private Groups	Charles Davies	1
	Stephen Price	*cancelled
	Paul Stewart	1
	Marissa Jensen	1
	Ann Kovich	1
Total Group Trailer Use Days		NA

Protocol Violations (See page 23 for details on protocol violations)

There was a total of 37 violations made by visitors from a total of 30 vehicles during the spring 2021 viewing season.

Vehicles (numbers and percentage) following proposed grouse viewing etiquette

Vehicles following protocol: 60 out of 90 (66%)

Vehicles not following protocol: 30 out of 90 (33%)

Of the 90 vehicles belonging to true visitors, 30 (33 %) violated viewing protocol

Of the 9 tour vehicles, 3 (33%) violated viewing protocol

Of the 81 private vehicles, 27 (33 %) violated viewing protocol

Of the 23 volunteer vehicles, 0 violated viewing protocol

Sisk-a-dee Educational Efforts

Sisk-a-dee didn't offer programs in 2021 due to COVID-19.

Gunnison Sage-grouse Lek Counts

2021 High Grouse Counts

High Male Count 38 males on 10 April
High Female Count 8 females on 4 May
Total High Count (known sex) 45 total male and females on 10 April
Total High count (including unknown sex) 56 total males, females, and unknown on 19 April

2020 High Grouse Counts

High Male Count 21 males on 25 April 2020
High Female Count 2 females on 11 April 2020
Total High Count (known sex) 21 total males and females on 15 April 2020
Total High Count (including unknown sex) 34 total males, females and unknown on 2 May
*Lek was only counted on 4 days in 2020.
* Jim Mendonca reported 57 grouse counted in the North Meadow on 11 April 2020

2019 High Grouse Counts

High Male Count 16 males on 15 April 2019
High Female Count 9 females on 5 April 2019
Total High Count 23 total grouse on 15 April 2019 (of known-sex grouse)
Total High Count 42 males, females, unknown sex on 15 April 2019

2018 High Grouse Counts

High Male Count 17 males on 19 April 2018
High Female Count 5 females on 1 April 2018
Total High Count 20 total grouse on 19 April 2018

2017 High Grouse Counts

High Male Count: 23 males on 12 April 2017
High Female Count: 6 females on 12 April 2017
Total High Count: 29 total grouse on 12 April 2017

2016 High Grouse Counts

High Male Count: 27 males on 10 and 14 April 2016
High Female Count: 9 females on 20 April 2016
Total High Count: 34 total grouse on 10 April 2016

2015 High Grouse Counts

High Male Count: 28 males on 21 April 2015
High Female Count: 4 females on 3 May 2015
Total High Count: 29 total grouse on 21 April 2015
Total High Count w/ unknowns: 41 total grouse on 8 May 2015

2014 High Grouse Counts

High Male Count: 19 males on 5 April 2014
High Female Count: 14 females on 1 April 2014
Total High Count: 44 total grouse on 8 April 2014

2013 High Grouse Counts

High Male Count: 31 males on 2 April 2013
High Female Count: 20 females on 7 April 2013
Total High Count: 37 total grouse on 7 April 2013

2012 High Grouse Counts

High Male Count: 22 males on 6 April 2012
High Female Count: 12 females on 1 April 2012
Total High Count: 25 total grouse on 1 April 2012

2011 High Grouse Counts

High Male Count: 27 males on 2 April 2011
High Female Count: 30 females on 5 April 2011
Total High Count: 51 total grouse on 5 April 2011

2010 High Grouse Counts

High Male Count: 32 males on 3 May 2010
High Female Count: 42 females on 10 April 2010
Total High Count: 74 total grouse on 10 April 2010

2009 High Grouse Counts

High Male Count: 29 males on 19 April 2009
High Female Count: 25 females on 8 April 2009
Total High Count: 53 total grouse on 6 April 2009

2008 High Grouse Counts

High Male Count: 37 males on 5 April 2008
High Female Count: 33 females on 18 April 2008
Total High Count: 63 total grouse on 16 April 2008

2007 High Grouse Counts

High Male Count: 34 males on 8 May 2007
High Female Count: 12 females on 30 March and 14 April 2007
Total High Count: 40 total grouse on 8 May 2007

2006 High Grouse Counts

High Male Count: 38 males on 2 May 2006
High Female Count: 26 females on 9 April 2006
Total High Count: 52 total grouse on 5 April 2006

2005 High Grouse Counts

High Male Count: 30 males on 30 May 2005
High Female Count: 27 females on 7 April 2005
Total High Count: 37 total grouse on 7 April 2005

Gunnison Sage-grouse count data at the three sub-leks of Waunita, spring 2021.

Date	Main Lek			North Meadow			East Ridge			Total*
	High Male	High Female	High Unknown	High Male	High Female	High Unknown	High Male	High Female	High Unknown	
2021 4/1	0	0	0	23	4	0	6	2	2	27
4/2	0	0	0	20	4	1	0	0	0	25
4/3	0	0	0	16	4	0	1	1	0	22
4/4	0	0	0	15	1	12	4	0	0	27
4/5	0	0	0	20	4	5	10	0	0	39
4/6	0	0	0	22	2	2	8	2	1	34
4/7	0	0	0	17	0	1	3	0	0	25
4/8	0	0	0	31	5	8	3	1	0	46
4/9	0	0	0	27	2	3	9	0	0	34
4/10	0	0	0	35	7	0	7	0	0	45
4/11	0	0	0	23	2	1	11	0	0	36
4/12	0	0	0	17	2	12	13	0	0	44
4/13	0	0	0	3	0	1	3	0	1	8
4/14	0	0	0	0	0	0	0	0	0	0
4/15	0	0	0	0	0	0	18	0	0	18
4/16	0	0	0	0	0	0	0	0	0	0
4/17	0	0	0	0	0	0	0	0	0	0
4/18	0	0	0	24	0	5	4	1	0	25
4/19	0	0	0	9	2	40	5	0	1	56
4/20	0	0	0	2	3	12	3	0	0	20
4/21	0	0	0	9	0	0	8	0	0	9
4/22	0	0	0	26	0	14	7	2	3	28
4/23	0	0	0	7	0	15	2	1	0	11
4/24	0	0	0	21	4	0	1	0	0	26
4/25	0	0	0	13	0	12	3	1	0	17
4/26	0	0	0	2	0	4	0	0	0	6
4/27	0	0	0	4	0	7	3	0	0	14
4/28	0	0	0	3	0	0	0	0	0	3
4/29	0	0	0	16	1	10	7	2	0	26
4/30	0	0	0	17	0	0	4	0	0	21
5/1	0	0	0	10	0	20	2	1	0	33
5/2	0	0	0	16	4	12	10	4	0	25
5/3	0	0	0	8	0	6	3	0	0	17
5/4	0	0	0	18	1	1	6	7	1	34
5/5	0	0	0	9	3	7	2	0	0	21
Total	0	0	0	483	55	211	166	25	9	
Average Birds per Day	(0/35) = 0			(749/35) = 21.4			(200/35) = 5.7			

Notes: **Red** indicates season high counts. These are not necessarily the total high counts for males, females or unknown, because they are only for individual lek. The high male, female, unknown, and totals came from leks combined. * Total grouse count is not always the sum of the individual counts because grouse may have moved among locations and would have been counted twice. The total count does not double count individuals seen at multiple lek locations on a day.

Waunita Watchable Wildlife Site Summary Statistics: 2004 – 2021

Statistic	2004	2005	2006	2007	2008	2009	2010	2011	2012
High Count Males	17	30	38	34	37	29	32	27	22
High Female Count	19	27	26	12	33	25	42	30	12
High Count Males and Females	30	37	52	40	63	53	72	51	25
Days Grouse Present at lek	30/30	39/40	37/37	40/41	38/40	40/40	40/40	41/41	34/40
Days Grouse flushed before sunrise	X/30; 0%	5/40; 12.5%	2/38; 5.3%	9/40; 22.5%	3/40; 7.5%	10/40; 25%	15/40; 37.5%	21/40; 52.5%	38/40; 95%
Days Flushed by Humans	1/30; 3.3%	1/40; 2.5%	2/38; 5.3%	2/37; 5.4%	2/37; 5.4%	2/40; 5.0%	1/40; 2.5%	2/40; 5.0%	3/40; 7.5%
Human Totals (including volunteers)	286	374	355	354	351	435	445	536	327
Visitor Totals (not including volunteers)		318	290	301	282	333	374	470	274
Vehicle Totals (including groups and monitors)	110	156	134	140	133	184	174	199	141
Vehicle Totals (no volunteers); % of total vehicles that are volunteers		102; 34.6%	85; 36.6%	97; 30.7%	80; 39.8%	109; 40.7%	115; 33.9%	140; 29.6%	98; 30.5%
Days at Least One Visitor at Site (out of total monitored days)	29/30; 97%	33/37;89 %	38/41; 93%	37/40; 92.5%	31/39; 79.5%	34/39; 87.2%	37/39; 92.5%	34/40; 85.0%	34/40; 85%
Percent of Cars that Violated Protocol	29%	19%	12%	8.9%	8.3%	20.7%	13.2%	5.7%	17.6%
Number of U.S States represented	23	31	24	25	30	28	26	27	24
Number of Countries	2	4	3	5	5	5	6	9	4

Waunita Watchable Wildlife Site Summary Statistics: 2004 – 2019 (continued)

Statistic	2013	2014	2015	2016	2017	2018	2019	2020 Pandemic	2021
High Count Males	31	19	28	27	23	17	16	21	38
High Female Count	20	14	4	9	6	5	9	2	8
High Count Males and Females	37	44	29	34	29	20	23	21	45
Days Grouse Present at lek	39/40	20/40**	39/40 [#]	38/40 [#]	37/40 [#]	26/28 ^{#+}	35/40 [#]	4/4	31/35 [#]
Days Grouse flushed before sunrise	35/40; 87.5%	6/20; 30%	5/39; 12.8%	5/40 12.5%	4/40; 10%	4/20 20%	9/26 35%	No data	21/39 54%
Days Flushed by Humans	2/40; 5%	3/20; 15%	2/39; 5.1%	0/40; 0%	0/40; 0%	0/28 0%	0/26 0%	No data	1/23 4%
Human Totals (including volunteers)	311	357	370	371	396	358	270	NA	246
Visitor Totals (not including volunteers)	233	297	299	310	333	290	214	NA	203
Vehicle Totals (including groups and monitors)	173	133	133	136	135	143	122	NA	113
Vehicle Totals (no volunteers); % of total vehicles that are volunteers	118; 31.7%	75; 43.6%	91; 46.2%	93; 31.6%	93; 31%	98; 32%	70; 43%	NA	90; 20%
Days at Least One Visitor at Site (out of total monitored days)	35/40; 87.5%	28/40; 70%	30/39; 77%	27/40; 67.5%	27/40; 67.5%	25/28 (89%)^{^+}	23/26 (88%)	NA	22/23 (96%)[^]
				26/31 (84%)[^]	25/30 (83%)[^]				
Percent of Cars that Violated Protocol	10.2%	3%	8.3%	9%	19%	11%	11%	NA	33%
Number of U.S States represented	27	23	22	24	21	31	25	NA	22
Number of Countries	9	5	4	4	4	8	5	NA	2

** This value represents the percent of days the grouse used the Main Lek site, they were present most days in new locations. In 2014, the grouse started moving to new locations.

[#]This value represents grouse present at all three lek locations: North Meadow, East Ridge, Main lek

⁺In 2019, volunteers were not present at the parking area on closed dates, volunteers were present on 26 days

[^]Represents the number of days visitors were present when the lek was open for viewing.

Disturbances and Flushing

Grouse Flushes and Disturbances

Earliest flush time: at 0558 on 5 May 2021

Longest duration of time grouse flushed before sunrise: 13 minutes on 11 April

Latest flush time: at 0743 on 12 April

Longest duration of time grouse flushed after sunrise: 1 hour and 23 minutes on 11 April

Frequency of days grouse flushed before sunrise: 21/39= 54%

Frequency of days grouse flushed after sunrise: 18/39 = 46%

Cause of Single, Multiple, or Entire Lek Flush

Unknown/no disturbance: 26 (67%)

Weather: 0

Coyotes: 3 (8%)

Golden Eagle (Other Birds of Prey): 0 (0%)

Other (horses, cattle, elk, ravens): 0 (0%)

Human related disturbances not at parking area (passing vehicles):9 (23%)

Human related disturbances at parking area: 1 (3%)

Total disturbances correlating with a single, multiple or entire lek flush: 39*

(*This number is also the total number of observed flushes that occurred this season)

All potential disturbances to the grouse*

Coyotes: 22 (13%)

Bird of Prey: 0 (0%)

Human related disturbances not at parking area (passing vehicles): 98 (57%)

Human related disturbances at parking area: 37 (22%)

Weather (snow, rain): 6 (3%)

Other (ravens, elk, pronghorn, hawks, cows): 9 (5%)

Total potential disturbances: 172

All human related potential disturbances*

Human activities associated with parking area

Car doors slamming (includes getting out of car**): 11 (8%)

Car idling: 1 (0.7%)

Left site early: 1 (0.7%)

Arrive at site late: 4 (3%)

Talking in car, beeping, coughing, moving, using bathroom: 2 (1%)

Started engine early/ during morning: 7 (5%)

Car horn in parking lot: 1 (0.7%)

Vehicle high beams: 1(0.7%)

Unspecified car noises: 9 (7%)

Total: 37

Human activities not associated with parking area

Vehicle drove by on County Road: 96 (71%)

Passing vehicle honked: 2 (1%)

Total: 98

Total human related disturbances: 135

*Potential disturbances did not necessarily lead to a response by sage-grouse. Included those above that correlated with a grouse response and those that did not. Includes disturbances that visitors wrote no response observed, because we might not necessarily see the response.

** Slamming doors and leaving vehicles were counted as separate individual incidences.

Summary of Lek Disturbances (Waunita Watchable Wildlife Site 2021)

Date	Disturbances	Flush to Sunrise	Weather
4/1	0715-0730 – 3 trucks drive down CR 887.	0720- 12 grouse flushed	18° F 0% Cloud Cover No Precipitation Wind Speed: 0 mph
4/2	0645 – truck drove by 8 other trucks drove by during the morning, including one that honked, but times were not logged.	0645 – 1 grouse flushed	20° F 15-40 % Cloud Cover No Precipitation Wind Speed: calm
4/3	No disturbances recorded.	No flushing events recorded.	22° F 0% Cloud Cover No Precipitation Wind Speed: 1 mph
4/4	0713 – Truck drove up CR 887 0733 – Coyote on the E. Ridge 0815-0820 – Coyote on the East Ridge	0714 – 13 grouse flushed to the right and over the E. ridge.	28° F 0% Cloud Cover to 5% by the end of the shift. No Precipitation Wind Speed: calm
4/5	0613 – Coyotes calling 0702 – Truck passed on CR 887. 0711– Raven 0723 – Coyote near N. Meadow birds. ~0715 – Three trucks pass	0613 – Too dark to see grouse. 0702 – No grouse response observed from truck. 0723 – No response observed from coyote. ~0715 – No response observed from passing trucks. 0729 – Last birds in N. Meadow flushed over hill, not correlated with a disturbance.	28° F 5% Cloud Cover No Precipitation Winds Speed: 0 mph
4/6	0620 – Dar drove by 0720 – Coyote observed near N. Meadow.	No responses recorded.	32° F 5% Cloud Cover No Precipitation Winds Speed: calm
4/7	~0630, ~0700 – Truck drives up CR 887 0719, 0710, 0719, 0751– Truck drives down CR 887	6:40 – One bird flushes East. 0700 – 19 birds flushed (visitor observation).	27° F 20% Cloud Cover No Precipitation Wind Speed: calm
4/8	0640 – Car passed. 0715-0730 – Four cars passed. 0735 – Car passed. 7:53 – Coyote on E. Ridge.	0630 – Three grouse flushed towards CR 887. 0632 – Two grouse flush towards the East ridge. 0645 – Five grouse flush towards East ridge. 0640-0735 – No response observed from passing cars.	19° F 30% Cloud Cover No Precipitation Wind Speed: 0 mph

Date	Disturbances	Flush to Sunrise	Weather
4/9	0648 – Coyote passes ~100 yards behind grouse in N. Meadow. 0715 – Truck passes. 0720 – Coyote calls. Hawk observed at site (time not specified)	0645 – 2 flushed from N. Meadow SE. 0648 – No response observed from coyote. 0715 – 5 grouse flush coinciding with truck. 0730-0745 – Remaining 21 males on the N. Meadow and 9 males on the E. Ridge flush W in small groups.	20° F 0-1% Cloud Cover No Precipitation Wind Speed: light
4/10	0620 – Coyote walking near N. Meadow	0620 – No disturbance observed.	16° F 0% Cloud Cover No Precipitation Wind Speed: 0 mph
4/11	0531 –Coyote calls 0613 – Coyote passes ~ 50 m behind N. Meadow lek. Stays until 0645. 0710, 0738, 0744, 0750, 0750 – Truck passes.	0531 – Grouse not visible to record response to coyote call. 0623 – 1 grouse flushed coinciding with coyote presence. 0710 – No response observed to passing truck. 0734 – 3 unidentified grouse flush from N. Meadow across CR 887. 0738 – 1 grouse flushed from North meadow across CR 887, in correlation with truck. 0740 – Last 3 grouse flush from N. Meadow (direction not specified). 0759 – 4 grouse flushed towards ridge, coinciding with truck passing.	25° F 0% Cloud Cover No Precipitation Wind Speed: calm
4/12	0655 – Coyote near N. Meadow lek. 0718 – White pickup drove up county road and yelled at volunteer.	0655 – No response observed to coyote. 0739 – 1 grouse flushed from N. Meadow across CCR 887. 0743 – 1 grouse flushed from N. meadow towards the E. ridge.	21° F < 5% Cloud Cover No Precipitation Wind Speed: 0 mph
4/13	0708 – Coyote near N. Meadow. Several cars drove by (count and time not specified).	0708 – No grouse visible at the time coyote was present. No responses observed to cars.	36° F 98% Cloud Cover No Precipitation Wind Speed: 15-20 mph
4/14	0602 – Coyote in Main Lek headed S. 0619, 0632 – Coyote heading N. 0638 –Pair of coyotes seen at N. Meadow. 0705, 0724 – Truck drives up CR 887. 0715, 0726 – Vehicle down CR 887. 0729 – Cow above N. Meadow. 0733 – Coyote at Main Lek	No grouse seen today.	39° F 30% Cloud Cover No Precipitation Wind Speed: light wind

Date	Disturbances	Flush to Sunrise	Weather
4/15	~0513 – Coyotes calling near N. Meadow.	No grouse observed in N. Meadow today.	39° F 80% Cloud Cover No Precipitation Wind Speed: 5 mph
4/16	Snowing lightly until ~ sunrise (0629).	No grouse observed today.	29° F 90% Cloud Cover Precipitation: Light snow Wind Speed: 3-5 mph, with intermittent stronger gusts.
4/17	Heavy snow, low visibility.	No grouse observed today.	28° F 100% Cloud Cover Precipitation: 1 in. snow Wind Speed: 5 mph
4/18	0615 – Truck passed.	0610 – 3 grouse flush N. 0630 – 3 grouse flush W, and 3 flush to E. Ridge.	20° F 97% Cloud Cover No Precipitation Wind Speed: 2-4 mph
4/19	0617, 0712, 0721 – Car down CR 887.	0616 – 1 grouse flushes from N. Meadow to E. Ridge 0622 – 40 grouse flush from N. Meadow across CR 887.	26° F <10% Cloud Cover No Precipitation Wind Speed: 0 mph
4/20	Several Cars drive by (times and direction not specified)	No response observed to vehicles.	27° F 10% Cloud Cover No Precipitation Wind Speed: Calm
4/21	0615 – Truck driving down road fast.	0616 – 3 grouse flush from N. Meadow. 0619 – 3 grouse flush from N. Meadow across CR 887, 3 flush towards ridge.	26° F 100% Cloud Cover Rain throughout night Wind Speed: 5 mph
4/22	0538, 0652, 0718 – Vehicle up CR 887. 0603, 0715, 0720 – Vehicle down CR 887. 0708 – Coyote chased grouse.	0610 – 14 flush across CR 887.	28° F 0% Cloud Cover No Precipitation Wind Speed: 0 mph
4/23	0607 – Visitor vehicle high beams turn on. 0635 – Visitor leaves car to set up scope. 0713, 0717 – Truck passes. 0610 – Mack truck passes. 0736 – SUV passes. 0750-0800 – Light snow falling.	0607 – 15 birds flush from N. Meadow across CR 887 coinciding with vehicle turning on high beams. 0635 – No response observed from grouse to visitor leaving vehicle. 0719 – 2 grouse on E. Ridge flush behind ridge.	32° F 100% Cloud Cover Dusting of snow, light snow falling. Wind Speed: 0 mph

Date	Disturbances	Flush to Sunrise	Weather
4/24	Moon nearing full.	All birds left site by 0619.	22° F 0% Cloud Cover No Precipitation Wind Speed: 0 mph
4/25	0630 – SUV drives down CR 887. 0704 – Truck drives up CR 887. 0705 – Truck drives down CR 887. 0742 – Truck passes.	0617 – 10 grouse flush from N. Meadow across CR 887. 0630 – 2 grouse flush from N. Meadow towards E. Ridge coinciding with SUV.	45° F <10% Cloud Cover No Precipitation Wind Speed: light
4/26	0615 – Car drives down CR 887. 0640 – Car drives down CR 887. 0700 – Car drives up CR 887	No flushing events observed.	
4/27	Full moon Several cars drove by (times and direction not recorded). ~0730 – Thick fog and snow sets in, making E. Ridge not visible.	No response from grouse observed to passing cars.	43° F 100% Cloud Cover No Precipitation Wind Speed: calm
4/28	0607 – Truck drives down county road. 0649 – Car drives down CR 887. 0656 – Truck drives up CR 887. 0713 – Truck drives down CR 887. 0722 – Truck drives down CR 887. 0728 – Truck drives down CR 887. 0732 – Car drives down CR 887. 0739 – Truck drives down CR 887.	Only 3 males observed in N. Meadow until 0645. Flushing time not observed.	26 ° F 40-95 % Cloud Cover No Precipitation Wind Speed: calm
4/29	0610, 0636, 0655 – Car drives down CR 887.	0600 – 15 birds flush across CR 887.	23 ° F 0 % Cloud Cover No Precipitation Wind Speed: 0 mph
4/30	0615 – People leave vehicles and use bathroom.	No response from grouse recorded, but by 0630 there were no grouse at the N. Meadow and by 6:45 there were no grouse at the E. Ridge.	27 ° F 0 % Cloud Cover No Precipitation Wind Speed: calm
5/1	0612-0631 –2 people drive up county road and parks adjacent to the N. Meadow lek and leave their vehicle, (closing doors carelessly) to view birds. Pass site going down CR 887 at 6:33. 0650 – Truck drives up CR 887. 0721– Truck down CR 887. 0721-0724– Van with 2 people park on the side of CR 887, get out and view the birds, adjacent to N. Meadow. Passes site at 0227. 0727– Truck down CR 887.	0558 – 30 grouse flush over county CR 887, no disturbance observed coinciding. No grouse were at site during either of the CR 887 parking violations.	No temp recorded 5 % Cloud Cover No Precipitation Wind Speed: calm

Date	Disturbances	Flush to Sunrise	Weather
5/2	0607-0611 – Coyote walks into the N. Meadow lek within close proximity of grouse. Lays down in lek at 0611 and was not seen again. ~7:00 – Truck drives down CR 887. ~7:30 – Truck drives up CR 887.	~0600 – 9 grouse flush over CR 887 and 3 grouse flush from N. Meadow to the E. Ridge. 0607 – 9 grouse flush from the N. Meadow towards E. Ridge while coyote is in their lek.	37 ° F 0 % Cloud Cover No Precipitation Wind Speed: calm
5/3	0604 – Truck down CR 887. 0601 – Begins raining until 0611. 0606 – 90% cloud cover. 0627 – Begins raining again and continues throughout morning.	0559 – 1 grouse flushed from the N. Meadow towards the base of the ridge. 0627 – Grouse continue displaying in the rain.	33 ° F 50-100 % Cloud Cover Rain Wind Speed: 0 mph
5/4	Several cars drove by (times and directions not recorded).	No observed reaction from grouse to the vehicles.	26 ° F 40-95 % Cloud Cover No Precipitation Wind Speed: calm
5/5	0556 – Coyote walks through the N. Meadow lek. 0610 – Semi truck drives down the county road. 0643 – Car drives down the CR 887.	0556 – One grouse flushed towards the E. Ridge with coyote presence, other remained undisturbed. 0600 – 7 grouse flush over the county road. No disturbance observed coinciding.	33 ° F 50 % Cloud Cover No Precipitation Wind Speed: 0 mph

Waunita Watchable Wildlife Site Daily Lek Statistics (2021)						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
28 March 0658 No viewing Volunteer Training Male High Count: 27 Female High Count: 1 Unknown High Count: 20 Total Count: 28 Flushed: 0645; 0740 Reason: unknown People: 9 Vehicles: 3	29 March 0656 No viewing	30 March 0655 No viewing	31 March 0653 No viewing	1 April 0652 Male High Count: 23 Female High Count: 4 Unknown High Count: 2 Total Count: 27 Flushed: 0645 Reason: unknown People: 8 Vehicles: 6	2 April 0650 Male High Count: 20 Female High Count: 4 Unknown High Count: 1 Total Count: 25 Flushed: 0645 Reason: Truck People: 12 Vehicles: 7	3 April 0648 Male High Count: 17 Female High Count: 5 Unknown High Count: 0 Total Count: 22 Flushed: unknown Reason: NA People: 9 Vehicles: 4
4 April 0647 Male High Count: 15 Female High Count: 1 Unknown High Count: 12 Total Count: 27 Flushed: 0713 Reason: Truck People: 15 Vehicles: 7	5 April 0645 Male High Count: 30 Female High Count: 4 Unknown High Count: 5 Total Count: 39 Flush: 0729 Reason: unknown, no disturbance. People: 1 Vehicles: 1	6 April 0644 Male High Count: 28 Female High Count: 4 Unknown High Count: 4 Total Count: 34 Flushed: unknown Reason: NA People: 20 Vehicles: 5	7 April 0642 Male High Count: 22 Female High Count: 2 Unknown High Count: 1 Total Count: 25 Flushed: 0700 Reason: unknown People: 19 Vehicles: 6	8 April 0641 Male High Count: 32 Female High Count: 6 Unknown High Count: 8 Total Count: 46 Flushed: 0630; 0632; 0645 Reason: unknown People: 8 Vehicles: 6	9 April 0639 Male High Count: 32 Female High Count: 2 Unknown High Count: 3 Total Count: 34 Flushed: 0645; 0715; 0730- 0745 Reason: unknown; truck; unknown People: 17 Vehicles: 7	10 April 0638 Male High Count: 38 Female High Count: 7 Unknown High Count: 0 Total Count: 45 Flushed: unknown Reason: NA People: 10 Vehicles: 7
11 April 0636 No viewing Male High Count: 33 Female High Count: 2	12 April 0635 No viewing Male High Count: 30 Female High Count: 2	13 April 0634 No viewing Male High Count: 6 Female High Count: 0	14 April 0632 No viewing Male High Count: 0 Female High Count: 0	15 April 0631 No viewing Male High Count: 18 Female High Count: 0	16 April 0629 No viewing Male High Count: 0 Female High Count: 0	17 April 0628 No viewing Male High Count: 0 Female High Count: 0

Waunita Watchable Wildlife Site Daily Lek Statistics (2021)						
Unknown High Count: 1 Total Count: 36 Flushed: 0759 Reason: Truck People: 2 Vehicles: 1	Unknown High Count: 12 Total Count: 44 Flushed: 0739; 0743 Reason: unknown People: 1 Vehicles: 1	Unknown High Count: 2 Total Count: 8 Flushed: unknown Reason: NA People: 1 Vehicles: 1	Unknown High Count: 0 Total Count: 0 Flushed: unknown Reason: unknown People: 2 Vehicles: 1	Unknown High Count: 0 Total Count: 18 Flushed: Reason: unknown People: 1 Vehicles: 1	Unknown High Count: 0 Total Count: 0 Flushed: unknown Reason: NA People: 1 Vehicles: 1	Unknown High Count: 0 Total count: 0 Flushed: unknown Reason: Unknown People: 1 Vehicles: 1
18 April 0626 Male High Count: 24 Female High Count: 1 Unknown High Count: 5 Total Count: 25 Flushed: 0610; 0630 Reason: unknown People: 17 Vehicles: 7	19 April 0625 Male High Count: 14 Female High Count: 2 Unknown High Count: 40 Total Count: 56 Flushed: 0616; 0622 Reason: unknown People: 10 Vehicles: 7	20 April 0624 Male High Count: 5 Female High Count: 3 Unknown High Count: 12 Total Count: 20 Flushed: unknown Reason: NA People: 5 Vehicles: 3	21 April 0622 Male High Count: 9 Female High Count: 0 Unknown High Count: 0 Total Count: 9 Flushed: 0610; 0619 Reason: unknown People: 3 Vehicles: 2	22 April 0621 Male High Count: 26 Female High Count: 2 Unknown High Count: 0 Total Count: 28 Flushed: 0610 Reason: unknown People: 2 Vehicles: 2	23 April 0620 Male High Count: 9 Female High Count: 1 Unknown High Count: 15 Total Count: 11 Flushed: 0607 Reason: Visitor vehicle high beams People: 8 Vehicles: 3	24 April 0618 Male High Count: 22 Female High Count: 4 Unknown High Count: 0 Total Count: 26 Flushed: 0619 Reason: unknown, no disturbance. People: 7 Vehicles: 4
25 April 0617 Male High Count: 16 Female High Count: 1 Unknown High Count: 12 Total Count: 17 Flushed: 0617; 0630 Reason: Unknown, no disturbance; car passing. People: 16 Vehicles: 8	26 April 0616 Male High Count: 2 Female High Count: 0 Unknown High Count: 4 Total: 6 Flushed: unknown Reason: NA People: 4 Vehicles: 3	27 April 0615 Male High Count: 7 Female High Count: 0 Unknown High Count: 7 Total Count: 14 Flushed: unknown Reason: NA People: 15 Vehicles: 7	28 April 0613 Male High Count: 3 Female High Count: 0 Unknown High Count: 0 Total Count: 3 Flushed: unknown Reason: NA People: 3 Vehicles: 2	29 April 0612 Male High Count: 23 Female High Count: 3 Unknown High Count: 0 Total Count: 26 Flushed: 0600 Reason: unknown People: 2 Vehicles: 2	30 April 0611 Male High Count: 21 Female High Count: 0 Unknown High Count: 0 Total count: 21 Flushed: unknown Reason: unknown People: 21 Vehicles: 7	1 May 0610 No viewing Male High Count: 12 Female High Count: 1 Unknown High Count: 20 Total count: 33 Flushed: 0558 Reason: unknown, no disturbance observed. People: 2 Vehicles: 1

Waunita Watchable Wildlife Site Daily Lek Statistics (2021)						
2 May 0608	3 May 0607	4 May 0606	5 May 0605	6 May 0604	7 May 0603	8 May 0602
No viewing	No viewing	No viewing	No viewing	No viewing	No viewing	No viewing
Male High Count: 16	Male High Count: 11	Male High Count: 24	Male High Count: 11			
Female High Count: 4	Female High Count: 0	Female High Count: 8	Female High Count: 3			
Unknown High Count: 5	Unknown High Count: 6	Unknown High Count: 2	Unknown High Count: 7			
Total Count: 25	Total Count: 17	Total Count: 34	Total Count: 21			
Flushed: 0600; 0607	Flushed: 0559	Flushed: unknown	Flushed: 0556; 0600			
Reason: unknown, no disturbance; coyote.	Reason: unknown	Reason: NA	Reason: coyote; unknown, no disturbance.			
People: 2	People: 1	People: 1	People: 1			
Vehicles: 1	Vehicles: 1	Vehicles: 1	Vehicles: 1			

* People and vehicles include volunteers. Flushed was filled out as unknown if it was not observed/recorded by volunteer. If flushing event occurrence was unknown, it's reason was marked as NA.

Gunnison Sage-grouse Watchable Wildlife Program Discussion and Recommendations for 2021

Gunnison Sage-grouse Use

In 2021, Gunnison Sage-grouse continued to use the Waunita lek site, with most of the use occurring in the North Meadow with less this year on the East Ridge (the grouse changed their distribution and movement away from the Main Lek in 2014). No grouse were observed in the Main lek during the 2021 viewing season. Inter-lek area movement was common between the North Meadow and the East Ridge, and less so from the East Ridge down to North Meadow. In 2018 and confirmed in 2021, based on counts and observations made from the east side (Monson Gulch) of the East Ridge, grouse were using the east facing side of the ridge and moving from the ridge top (observable from the Waunita Watchable Wildlife Site) to the east facing slope and the habitat on that side of the ridge that is not visible from the Waunita Watchable Wildlife Site.

Overall grouse numbers were high in 2021. The high male count was higher than it has been since 2006 and the high combined male and female count was higher than it has been since 2011. The high male count was 38 on 10 April and the high female count was 8 on 4 May and the high combined male and female count was 45 on 10 April. The high combined count including males, females and individuals of unknown sex was 56 grouse on 19 April. These birds included a flock that used the North Meadow Lek early for a short time, then flew from the North Meadow lek at 0622 in the direction of another regional lek to the west. The high female count was relatively low (8). This may in part reflect the long distance from the lek to the viewing site and the challenges of seeing females across the large landscape of the Waunita lek complex.

In 2021, we observed a total of ten human related disturbances that may have been the cause of grouse flushing events. We detected 1 incidence of visitor behavior (vehicle high beams) coinciding with a grouse flushing event and possibly being the cause of disturbance. No other visitor disturbances were observed to lead to a grouse disturbance. This is likely related to the long distance of the birds from the viewing area which is typically about 1 km. The other 9 flush events coincided with passing traffic along county road 887. In addition to these human related disturbances, 3 additional flush events coincided with coyote activity. Coyotes were frequently observed at the lek in 2021 (a total of 25 times), although most often (88% of the time) no response from grouse was observed. The remaining 26 flush events observed this season occurred with no disturbance observed, and the reason was unknown.

Main Lek

No grouse were observed at the Main Lek in 2021. We continue to manage the viewing site and parking lot to minimize disturbances to the Main Lek and potentially allow grouse to move back to this location.

North Meadow

The North Meadow was used consistently, more frequently and in greater abundance than the East Ridge. Grouse occupied the North Meadow 19 of the 23 viewing days (83%) compared to 20 of 26 viewing days (77%) in 2019. Grouse activity in the North Meadow seemed to stay consistent throughout the viewing season, and grouse frequently flushed from here to either the west, or to the East Ridge later in the morning. Observations in the North Meadow were somewhat obstructed due to dense willows between the viewing area and the lekking areas and this made it more challenging for visitors, in part, depending on the angle they were parked. Grouse seemed to disappear easily and quickly in the willows and small topographical complexities in the North Meadow, and it was difficult to get a confident full count. A few

times when grouse would flush from the North Meadow it would be apparent that many other grouse were also at the lek but not visible prior to flight. Counts, especially known sex counts, may be underestimated because of this. The site continues to benefit from Gunnison County's "No Parking" restrictions along County Road 887 north of the lek viewing area that deter visitors from trying to obtain closer views and create potential disturbances of the grouse in the North Meadow.

East Ridge

The East Ridge was used consistently throughout the season, but less grouse were seen there than in the North Meadow. In addition, less grouse were seen on East Ridge in 2021 than in 2019 and previous years. Grouse were observed on the East Ridge 17 of the 23 viewing days (74%), compared to 24 of 26 (92%) days in 2019. Grouse were observed in groups of up to 18 max on the highest days, but more frequently in smaller groups. They could be found in various areas along the ridge but were mostly observed on the ridge spine and northern end of the ridge. Grouse were observed flying and walking from the North Meadow to the East Ridge. Grouse present at the top of the East Ridge provided reasonable viewing with a spotting scope, especially when grouse were silhouetted on the ridge and when the sun broke the horizon. Distinctive identifying features of males could be readily observed.

Visitation and Site Management

In 2021, the Waunita Watchable Wildlife Site received 203 true visitors, compared to 214 in 2019. There were 90 true visitor vehicles in 2021 compared to 70 in 2019. In 2021, the site was closed from 11- 17 April, to create a period protecting the grouse from disturbance by human visitors. Due to COVID-19 restrictions there was no viewing trailer parked at the site in 2021 and all visitors viewed from their vehicles. Also due to COVID-19, international and commercial use was down this year, with only one visitor from the United Kingdom, and only 4 commercial groups. Over time, the number of available viewing days has declined from 40 days in 2004-2015 (1 April to 10 May). In 2018 and 2019, the site was closed 2 days per week allowing for 28 (2018) and 26 (2019) days open to visitors. In 2020, the site was closed for the season due to COVID-19. In 2021, the sites was open from 1-10 April, closed from 11-17 April, open from 18-30 April and closed after 30 April, providing 23 days open to visitors. The average number of true visitors at the site from 2004-2017 was 316 in 100 vehicles, compared to an average of 236 true visitors in 2018, 2019 and 2021 in 86 vehicles. While the number of available days declined by 42% (from 40 days to 23 days) the number of visitors declined by 25% and the number of vehicles declined by 14%. Comparing visitor use from 2013-2017 to the last four years when the number of potential visitor days has been reduced, the mean number of true visitors from 2013-2017 was 294 in 94 vehicles. The reduction in visitation was 20% in visitors and 6% in vehicles. These trends show that while viewing opportunity has been reduced, visitation has not declined proportionately. In fact, the average number of visitors per day increased from 7.9 in 2.5 vehicles from 2004-2017 to 8.8 people in 3.9 vehicles in 2021. In 2021, visitation likely would have been significantly higher had we offered the viewing trailer. Of course, a major loss of visitors included the commercial groups, most of which cancelled their reservations in 2021.

The number of visitor protocol violations were higher in 2021, with 30 (33%) out of the 90 total non-volunteer vehicles that visited this year committing a protocol violation. This was the highest rate of protocol violations since data began being collected in 2004. Although the 2021 protocol violation rate was high, on only one occasion was reaction observed from the grouse, and likely that is because many of the recorded disturbances were too subtle to affect the grouse at the distance they are (1 km) from the Watchable Wildlife parking area. However, our protocols intend to manage human behavior as if the grouse were still using the Main Lek and therefore provide the possibility for the birds to return to this location. Activity at the viewing area creates noise and movement that potentially have negatively impacted the birds over the years. It is important to continue to monitor human use and have volunteers on site to remind visitors of the viewing protocols. The more we are able to provide viewing from the viewing trailer, the more likely we reduce protocol violations and grouse disturbances. In past years, we

have found that visitors using the trailer commit fewer protocol violations than parking lot visitors. We have also allowed some lenience on protocols at the end of the morning when the grouse are wrapping up their displays and not within 1 km of the viewing site. We invite visitors to step outside their vehicles and view the grouse through the volunteer's scope, if they weren't able to see the grouse earlier.

Waunita Watchable Wildlife Site Management Strategies

1. Established visitor conduct standards (viewing protocols)
2. Reservation system and commercial permitting for commercial birding groups
3. Communication strategy (website, email and phone contacts, blogposts)
4. Program coordination
5. Volunteer monitoring
6. Education effort (conservation programs and viewing tours)
7. Site establishment (conservation easement, CPW owned viewing location)
8. Site management (parking area and wall, viewing trailer, outhouse)
9. Enforcement via wildlife harassment statute
10. Closure dates (7 consecutive closed dates in middle of season equates to 42% fewer days with human activity at the site)
11. Monitor effectiveness of closure dates (a. volunteers monitor site on closed dates, b. volunteers park 100 m from site and intercept visitors before they get to site, and c. remote surveillance with cameras)
12. Prohibition of parking along county road
13. Encourage Gunnison County, CPW and USFWS law enforcement presence at site to enforce parking, site closure and wildlife harassment regulations
14. Funnel more individuals and small private groups into the viewing trailer (not possible in 2021, but continue this practice in future)

The purpose of the no viewing days is to reduce human caused disturbance at the site. The 7 closed days in the 30-day viewing season reduced the total number of days that human activity was present by 42% over historic season of 40 consecutive open days. Volunteers were not present at the parking lot in 2021 on closed dates. Instead, they parked on County Road 887 about 100 m below the Waunita Watchable Wildlife Site parking area and propped up a CPW sign that said the site was closed. This was a new location compared to previous years where volunteers parked closer to U.S. Highway 50 and had a poorer view of the lek. This new location allowed for better sage-grouse counts on closed dates and easy surveillance of the watchable wildlife site. Interestingly, during the closed period lower sage-grouse use was documented by volunteers. On 4/14, 4/16, and 4/17, no Gunnison Sage-grouse were observed on any portion of the lek. On 4/14 numerous potential disturbances were recorded including coyotes on the

North Meadow and trucks on the county road. On 4/16 and 4/17, weather likely influenced grouse activity as it snowed on both mornings. Low counts may also have been due to reduced visibility from the location that volunteers were parked during the mid-season viewing period. A few interactions with passing vehicles gave the impression that local residents or workers were disgruntled by volunteers parking on the county road, so for the five days of May that the site was monitored after the viewing season closed, volunteers parked in their usual location at the Watchable Wildlife Site. Counts were also made during these days. CPW installed a camera at the viewing area to enhance site surveillance on closed days.

At least two visitors apparently did not know that the site was closed on a date they arrived for viewing. One was upset and drove past the volunteer and claimed that the closure dates were not publicized on the webpage (which was not true). This scenario creates negative feelings about the program and species. We will continue to work to proactively publicize site policies, management changes, and viewing protocols.

Viewing sage-grouse at the Waunita site poses many challenges in addition to the long-distance views (facing east into the sun, birds readily move to out of view locations on east side of East Ridge, in North Meadow numerous vegetative obstructions limit viewing potential). Nevertheless, visitors are able to observe the Gunnison Sage-grouse in the wild during the frigid spring dawn with a spotting scope and are able to observe distinctive features necessary for proper species identification. Seeing the Gunnison Sage-grouse provides a fulfilling thrill to most visitors.

During the season, 8 vehicles reported that they did not see any grouse. This was related to 1) grouse not present on those viewing dates and 2) challenging conditions for viewing, including if visitors did not have their own scope. With the help of a guide (volunteer) who knows where to look for the grouse and has developed a search image, the probability of a visitor successfully viewing the grouse increases substantially. This management strategy, providing more assisted viewing and less self-service viewing (which generally is associated with less success and higher potential disturbance) helps create a positive viewing experience, especially for visitors who travel long distances to Gunnison for this “bird”.

Visitors and communications

Sisk-a-dee continued to communicate with the public regarding the Watchable Wildlife Site. Many visitors who contact Sisk-a-dee are interested in viewing grouse outside of the 1-30 April viewing season. Many other calls and e-mails are related to specific questions about the viewing experience and timing of viewing. The public is able to reach Sisk-a-dee by phone (970-641-3959), by visiting the Sisk-a-dee webpage (Siskadee.org), or by Dr. Patrick Magee’s cell phone (970-641-3959) or e-mail address (patrickmagee90@gmail.com or pmagee@western.edu). Interested parties were also able to contact Alexandra Fortney through e-mail (Alexandra.fortney@western.edu) and phone (970-946-9367) to make trailer reservations for 2021 and 2022.

Reservations and Fees

As of this year, CPW now requires private visitors to obtain a hunting or fishing license to access any state wildlife areas (including Waunita). Commercial users are not required to obtain a hunting or fishing license because they are under Sisk-a-dee’s commercial use permit. Instead of CPW issuing commercial use permits to each commercial birding group, they issue an umbrella permit to Sisk-a-dee and Sisk-a-dee then handles all the reservations and charges a fee to commercial users (and other groups that use the viewing trailer). Reservation fees remained at \$100 for the 2021 viewing season and Sisk-a-dee honored all reservations but because the trailer was not available, commercial groups were allowed to view from their vehicles. The reservation policy is that groups can begin to reserve the trailer on 1 January for the following year to accommodate commercial bird viewing companies, who are scheduling their trips more than a year in advance. For example, several groups began reserving the trailer for the 2022 season on 1

January 2021. All groups must make a reservation under Sisk-a-dee's special use permit with CPW and all groups are required to be in the trailer, not in the parking lot.

The new standardized regulations for the Waunita Watchable Wildlife Site approved by the Colorado Wildlife Commission will reduce potential disturbance to the Gunnison sage-grouse and will make closure dates more consistent.

Visitor Impact

Visitor surveys were distributed by volunteers as grouse viewers drove up to the site. Based on 64 surveys received, the average expenditure per visitor was \$473.90. If the subsample of 64 visitors is applied to the 203 total true visitors, the total estimated expenditure was \$96,203.70. Gunnison Sage-grouse viewing benefits the local economy during a slow time of the year for businesses in Gunnison.

Volunteers

Volunteers represent the core of the Waunita Watchable Wildlife Program. These individuals woke up early, collected data, and interacted with the public on chilly mornings. They have been dependable and hard-working over the many years of the program. Due to the difficulty of counting grouse at Waunita, on site volunteer training is critical. Ten volunteers in 2021 provided the work force to monitor human behaviors, interface with the public, and gather data. To recognize these individuals, CPW and Sisk-a-dee hosted a volunteer appreciation pizza dinner at the Gunnison Pizza Company in Gunnison on 2 May, 2021. CPW generously supplied the food and each volunteer received an insulated mug from Sisk-a-dee.

Appendices

Contacts for 2021 Sage-grouse Viewing Groups

Company Name	Contact name	E-mail	Phone
Non profit	NA	NA	NA
Commercial			
High Lonesome Bird Tours	Kip Miller	kipgmiller@gmail.com	
WINGS Birding Tours	Stephanie Schaefer	greg@wingbirds.com	520-320-9868
Partnership for International Birding	David Trently	david@pibird.com	
Tropical Birding	Desiree D'Sylva	reservations@tropicalbirding.com	
Private			
Charles Davies	Charles Davies	lisamoorehead907@gmail.com	
Stephen Price	Stephen Price	Davies1973@hotmail.com	
Paul Stewart	Paul Stewart	Paulstewart9762@gmail.com	
Marissa Jensen	Marissa Jensen	mjensen@pheasentsforever.org	
Ann Kovich	Ann Kovich	Akovich49@gmail.com	

Volunteer Duties

Viewing Day - Parking lot volunteer duties:

1. Pick up scope, clip board, and data sheets by 3:00 pm the day before.
2. Dress warmly and bring headlamp.
3. Allow 40 minutes to drive to the site and arrive at lek at least one hour and thirty minutes prior to sunrise (see schedule).
4. Set up spotting scope with window mount.
5. Greet visitors as they arrive and explain protocol.
 - a. Have them fill out economic impact survey completely.
 - b. Make sure they know to stay in their car with lights and motor off until you signal them.
6. Fill out visitor form, where they are from and number in car, and **all** other data.
7. If visitors arrive late exit your car and politely remind them of the viewing protocol and give them a copy.
8. If anyone violates the viewing policy (leave car, runs engine, uses restroom, etc.) be proactive and courteously remind them of the protocol. If they continue record their information and report to coordinator. Record if the grouse flush as a result of their carelessness.
9. Count grouse per protocol and completely fill out sheet, **record all disturbances**.
10. After your first accurate count, record license plate numbers and talk with visitors to point out grouse locations and answer questions.
11. After all grouse have flushed, tell visitors they can use the restroom and or leave.
12. Collect all visitor surveys, or let them know they can mail their responses (address is on sheet).
13. Return scope and data sheets **immediately** and sign volunteer sheet.

Non Viewing Day – Road Monitoring volunteer duties:

1. Pick up 'site closed' sign, data sheet and spotting scope by 3:00 pm the day before.
2. Dress warmly and bring head lamp.
3. Arrive at site at least 1 hour and 30 minutes prior to sunrise.
4. Park 100 m down road from the Watchable Wildlife Site parking area on side of the road, park at angle so you can set up spotting scope on window and view the lek..
5. Place sign outside of car, so that it is visible to oncoming vehicles.
6. As car approaches get out of your vehicle and greet the visitor, explain what you are doing if they ask.
 - a. This is a residential area, so it may be someone who lives nearby
 - b. If it is a visitor for the Waunita site, explain why we have closures
 - c. Suggest other days they may visit
7. Fill out data sheet, briefly explain conversation, record license plate, and all other data.
8. Using spotting scope conduct lek count.
9. Be aware of surroundings, note any predators, disturbances, or birds (if seen).
10. Stay at site until approximately 7:15 am, or until you feel birds would not be disturbed by possible late-viewers.
11. Return sign, turn in data sheet, and sign volunteer sheet.

2021 Waunita Watchable Wildlife Site: Gunnison Sage-grouse Lek Viewing Information and Protocol



Protocol Updates for 2021:

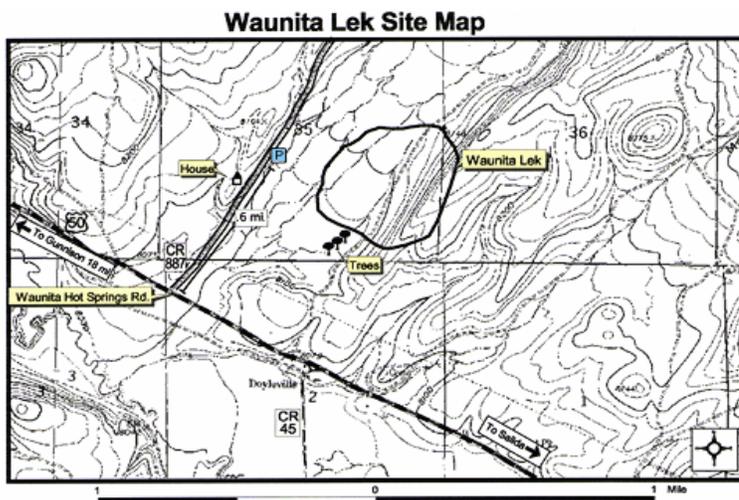
- Gunnison County prohibits parking along the side of the county road (CR 887) adjacent to the watchable wildlife site. The county sheriff's office has agreed to patrol the site and enforce the no parking policy.
- Gunnison County has installed No Parking signs along County Road 887 north of the viewing site. Please refrain from driving north of the Waunita Watchable Wildlife Site parking area to observe grouse from the side of the road. No Parking laws will be enforced in early mornings by the Gunnison County Sheriff's office. County, state and federal law enforcement are cooperating and will be present throughout the viewing season to enforce parking policies, overnight camping prohibition, and wildlife harassment statutes.
- The watchable wildlife site opens on April 1 and is closed beginning on May 1. To further minimize human disturbance to the grouse the public viewing site will be closed on **April 11, 12, 13, 14, 15, 16 and 17**. We are asking viewers to refrain from going to the site on these dates.

Directions to the Waunita Lek:

Gunnison Sage-grouse predictably use the Waunita Lek, located 19 miles east of Gunnison just north of Hwy 50. Turn north on County Road 887 (Waunita Hot Springs Road) and go 0.6 miles to a small pull-off on the right where you can view the birds. A viewing trailer, just north of the parking lot, is available by reservation only or Sisk-a-dee tours, free to the public. The lek is located to the east of the road in the open meadow (see map). This observation point offers a good view of the birds through binoculars and spotting scopes and is far enough away from the lek to minimize disturbance to the birds. The lek is located on private property, but the pull-off is a Colorado Parks and Wildlife managed Watchable Wildlife site. **The site is open April 1st through April 30th but is closed from 11-17 April.**

Where to see the birds:

The Waunita Lek extends from the pull-off to the top of the eastern ridge and from the willows on the left (north) to two cottonwood trees to the south. There is a fence brace about halfway to the ridge and almost directly west from the pull-off. The birds are most commonly seen just north of the fence brace, displaying on either side of the fence.



When to see Gunnison Sage-grouse displays:

The best time to view the elaborate and bizarre breeding dance of the Gunnison Sage-grouse is during April. Gunnison Sage-grouse wake up early and arrive on the leks (breeding grounds) before dawn. Therefore, to minimize impacts on birds, **VISITORS MUST ARRIVE AT LEAST ONE HOUR BEFORE OFFICIAL SUNRISE** and remain at the lek until breeding displays have ended. Visitors should leave Gunnison at least 1 hour 45 minutes before sunrise. Displays may continue for a couple hours after sunrise. For sunrise information please refer to the sunrise table on the backside of this page.

Gunnison Sage-grouse Lek Viewing Protocol

2021 Gunnison Sunrises

The Gunnison Sage-grouse is a seriously imperiled species and highly vulnerable to human disturbance. The US Fish and Wildlife Service listed the Gunnison Sage-grouse as a Threatened Species on 12 November 2014 under the Endangered Species Act. Sisk-a-dee, Colorado Parks and Wildlife, and Western State Colorado University are actively managing the Waunita Watchable Wildlife site to minimize the impacts of viewing the birds. Please help us make this viewing experience quality for you and other birders by following the protocol below. Thank you for your efforts and enjoy the rare and beautiful dance of the Gunnison Sage-grouse! If you do not wish to view the sage-grouse from your car, you may reserve the viewing trailer (www.siskadee.org for more information) for a fee, or you may attend one of the free tours led by Sisk-a-dee.

- **Arrive at the Waunita Watchable Wildlife site at least 1 hour before sunrise.** You should leave Gunnison at least 1 hour 45 minutes before sunrise. See the table to the right for this year’s sunrise times.
- If you are the first vehicle, pull up into the semi-circular drive behind the rock wall as far north as you can. Subsequent vehicles parallel park behind the first car. Please pull up as close as possible to the vehicle in front.
- When you arrive at the Waunita Watchable Wildlife Site a volunteer will greet you. They can help answer questions and will be monitoring your activities through the morning. Please do not leave your vehicle.
- Turn off vehicle engine when you arrive and do not start up engine until you leave. You must remain in your car until all birds have flushed from the lek.
- Please remain in your vehicle and set up a spotting scope. Remain as quiet as possible: NO radios, cell phones, horn honking, car door slamming or other automobile noises.
- An outhouse is available at the site. **After** the grouse have flushed you are welcome to leave your vehicle, use the outhouse, and read the interpretive literature.
- Remain very quiet; if you do talk keep your voices to a whisper.
- **Do not leave the site and remain in your vehicle until the birds have ended their displays and have departed from the lek. A volunteer will indicate when it is appropriate to leave.**

Day	April
1	0652
2	0650
3	0648
4	0647
5	0645
6	0644
7	0642
8	0641
9	0639
10	0638
11	0636
12	0635
13	0634
14	0632
15	0631
16	0629
17	0628
18	0626
19	0625
20	0624
21	0622
22	0621
23	0620
24	0618
25	0617
26	0616
27	0615
28	0613
29	0612
30	0611

Times are adjusted for daylight savings

Site Management:

Colorado Parks and Wildlife owns and manages the pull off. Protocols are enforced by them. *Any person deviating from these protocols is suspect to a wildlife violation and fine.* Sisk-a-dee provides educational programs and viewings for the public and holds the permit to coordinate the commercial use of the Waunita Watchable Wildlife Site from the Colorado Parks and Wildlife. Contact Sisk-a-dee for more information (siskadee.org). Western Colorado University (WCU) provides volunteers to monitor the bird population and human disturbances at the site. Contact Colorado Parks and Wildlife at 970-641-7060, or Sisk-a-dee at 970-641-3959 for more information.

If you are interested in information on local accommodations please contact the Gunnison Country Chamber of Commerce: 500 East Tomichi, Gunnison, CO 970-641-1501. Waunita Hot Springs Ranch, 8 miles northeast of the lek, also offers lodging (970-641-1266, <http://www.waunita.com>).

Habitat Stamp: Visitors of Colorado State Wildlife Areas may purchase a Colorado Wildlife Habitat Stamp from the Colorado Parks and Wildlife. Proceeds go to protecting wildlife habitat. Stamps may be purchased online at: <http://wildlife.state.co.us/LandWater/HabitatStamp/Pages/HabitatStamp.aspx>

Gunnison Sage-grouse Waunita Watchable Wildlife Program Highlights

Partnership

Sisk-a-dee, Western Colorado University, Colorado Parks and Wildlife (CPW), Gunnison County, Gunnison Basin Sage-grouse Strategic Committee (Watchable Wildlife Sub-committee).

Land Conservation -- Public/Private Partnership

Double Heart Ranch has conservation easement on private property containing the lek
Conservation easement held by The Nature Conservancy
CPW owns parking and viewing area.

Site Management – CPW, Gunnison County and Strategic Committee

CPW is responsible for site logistics
CPW built the site – includes a parking driveway, a rock wall, viewing trailer site, educational signage
CPW owns and maintains viewing trailer and moves it on and off the site
CPW regulates site rules such as season dates and closed dates in consultation with
Strategic Committee and Sisk-a-dee
CPW issues a Special Use Permit to Sisk-a-dee to coordinate the Watchable Wildlife Program
CPW employs remote surveillance of site to assess protocol violations
Gunnison County regulates parking along County Road 887 adjacent to lek viewing area

Educational Program and Public Viewing – Sisk-a-dee, CPW

Sisk-a-dee provides free programs open to public, consists of an evening slide show and morning viewing; program highlights grouse ecology and conservation
Sisk-a-dee maintains web site with lek viewing information (www.siskadee.org)
Sisk-a-dee developed viewing protocols for general public and commercial users
Sisk-a-dee serves as central contact for inquiries about lek viewing and photography

Commercial Lek Viewing – Sisk-a-dee, Western, CPW

Sisk-a-dee communicates with commercial groups and maintains/updates viewing protocols
Sisk-a-dee holds Commercial Use Permit with CPW and collects user fees
Western volunteers guide groups to viewing trailer

Human Use and Grouse Monitoring Effort – Western, CPW, Sisk-a-dee

CPW provides paid internship opportunity for Western student (Student Coordinator)
CPW helps attract volunteers for the site through their volunteer program
Sisk-a-dee and Western coordinate volunteer effort
Student Coordinator coordinates the volunteer effort
Student supervises and trains a team of volunteers (approximately 10-15 volunteers monitor the viewing area every morning from 1 April to 5 May)
One volunteer serves as the monitor for the public viewing in parking lot, greets visitors
One volunteer accompanies the commercial viewers to viewing trailer
Both volunteers record number of grouse at site according to CPW lek counting protocol
One volunteer monitors the site from down the county road on closed days
Public viewing volunteer also collects data on the number of human visitors and their behaviors
Student Coordinator organizes site visits for all commercial groups
Western and Sisk-a-dee manage the data and write a final report for CPW each season

Waunita Watchable Wildlife Site Gunnison Sage-grouse Viewing Scheduling Calendar 2021

Updated March 26 2021

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
March 28 Volunteer training	March 29 NO VIEWING	March 30 NO VIEWING	March 31 NO VIEWING	April 1 Viewing Season Opens Charles Davies Daviesc1973@hotmail.com N=1 J Sunrise- 6:52AM Jace & Emma	April 2 High Lonesome Bird Tours Kip Miller kipgmiller@gmail.com N=8 Sunrise- 6:50AM Emma	April 3 Sunrise- 6:48AM Petar
April 4 Seven Ponds Nature Center Carl Bendorf carlbendorf@gmail.com N=8 *Cancelled* Wildside Nature Tours/Zeiss Birding Adrian Binns 241 Emerald Drive, Yardley PA 19067 binns@wildsideoursinc.com C:609-575-1048 O:888-875-9453 N=8 *Cancelled* Sunrise- 6:47AM Bronwyn & Te'a	April 5 She Flew Birding Tours Sue Riffe sheflew@gmail.com *Cancelled* Sunrise- 6:45AM Heather	April 6 High Lonesome Bird Tours Forrest Davis forrest@highlonesometours.com N=16 Sunrise- 6:44AM Grant & Eric	April 7 WINGS Birding Tours Stephanie Schaefer 520-320-9868 greg@wingsbirds.com N=12 Sunrise- 6:42AM Courtney & Katy	April 8 Wild Wings Dick Filby H: 970-704-9178 C: 970-948-1906 dickfilby@hotmail.com *cancelled* Sunrise-6:41AM Jace	April 9 Tropical Birding Desiree D'Sylva reservations@tropicalbirding.com 1 van N = 7 Sunrise- 6:39AM Emma	April 10 VENT Brian Gibbons thehornedgaun@gmail.com N=16 *Cancelled* Sunrise- 6:38AM Petar

April 11 NO VIEWING Park by Highway Sunrise- 6:35AM Bronwyn & Te'a	April 12 NO VIEWING Park by Highway Sunrise- 6:35AM Heather	April 13 NO VIEWING Park by Highway Sunrise- 6:34AM Grant & Eric	April 14 NO VIEWING Park by Highway Sunrise- 6:32AM Courtney & Katy	April 15 NO VIEWING Park by Highway Sunrise- 6:31AM Jace	April 16 NO VIEWING Park by Highway Sunrise- 6:29AM Emma	April 17 NO VIEWING Park by Highway Sunrise- 6:28AM Petar
April 18 She Flew Birding Tours Sue Riffe sheflew@gmail.com <u>*Cancelled*</u> Sunrise- 6:26AM Bronwyn & Te'a	April 19 Sunrise- 6:25AM Heather	April 20 Stephen Price Sprice81@gmail.com N=2 *CANCELLED* Sunrise- 6:24AM Grant	April 21 Sunrise- 6:22AM Bronwyn & Katy	April 22 Earth Day Wild Wings Dick Filby H: 970-704-9178 C: 970-948-1906 dickfilby@hotmail.com <u>*Cancelled*</u> Sunrise- 6:21AM Jace	April 23 Paul Stewart Paulstewart9762@gmail.com N=1 Sunrise- 6:20AM Bronwyn	April 24 Sunrise- 6:18AM Petar
April 25 Marissa Jensen mjensen@pheasantsforever.org N=2 Sunrise- 6:17AM Bronwyn & Te'a	April 26 Sunrise- 6:16AM Heather	April 27 Ann Kovich Akovich49@gmail.com N=4 Sunrise- 6:15AM Grant	April 28 Sunrise- 6:13AM Courtney & Katy	April 29 Sunrise- 6:12AM Jace	April 30 Viewing Season Ends David Trently NAPIB david@pibird.com N=8, one van Sunrise- 6:11AM Emma	May 1 NO VIEWING Park by site Sunrise- 6:10AM Petar
May 2 NO VIEWING Park at site Sunrise- 6:08AM Bronwyn & Te'a	May 3 NO VIEWING Park at site Sunrise- 6:07AM Heather	May 4 NO VIEWING Park at site Sunrise- 6:07AM Grant	May 5 NO VIEWING Park at site Sunrise- 6:06AM Courtney & Katy Last day of monitoring	May 6 NO VIEWING	May 7 NO VIEWING	May 8 NO VIEWING

**Waunita Watchable Wildlife Site Gunnison Sage-grouse Viewing
Scheduling Calendar
2022**

Updated 28 April 2021

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
March 27 NO VIEWING	March 28 NO VIEWING	March 29 NO VIEWING	March 30 NO VIEWING	March 31 NO VIEWING	April 1 Viewing Season Opens BirdQuest Nigel Sadler birders@birdquest-tours.com N=8 Sisk-a-dee Program 6:30pm H130	April 2 Sisk-a-dee
April 3 VENT Brian Gibbons thehornedgaun@gmail.com	April 4 High Lonesome Bird Tours Forrest Davis forrest@highlone.com N=8	April 5 High Lonesome Bird Tours Forrest Davis forrest@highlone.com N=16	April 6 WINGS Birding Tours Stephanie Schaefer 866-547-9868 greg@wingsbirds.com N=16 *Forrest Davis would like this date if it becomes available, N=16	April 7 Tom Painting Tpainting51@gmail.com N=1 She Flew Sue Riff sheflew@gmail.com *Dick Filby would like this date if it becomes available, N=10* Sisk-a-dee Program 6:30pm H130	April 8 Sisk-a-dee	April 9 Carl Bendorf carlbendorf@gmail.com N=10
April 10 NO VIEWING	April 11 NO VIEWING	April 12 NO VIEWING	April 13 NO VIEWING	April 14 NO VIEWING	April 15 NO VIEWING	April 16 NO VIEWING

<p>April 17</p> <p>Wildside Nature Tours Adrian Binns binns@wildsidetoursinc.com N=8</p>	<p>April 18</p> <p>North Am. Partnership for International Birding David Trently david@pibird.com N=16</p>	<p>April 19</p> <p>Stephen Price Sprice81@gmail.com N=2</p>	<p>April 20</p> <p>Jeff Kaboly jeffk@jkaboly.com N=3</p> <p>Vicki Ramsey Eve43@sbcglobal.net C: 916-652-0489 N=2</p>	<p>April 21</p> <p>Dick Filby dickfilby@hotmail.com N=10</p>	<p>April 22</p> <p>Earth Day Quetzal Tours Nick Komar quetzal65@comcast.net N=15</p>	<p>April 23</p>
<p>April 24</p> <p>She Flew Sue Riff sheflew@gmail.com</p>	<p>April 25</p>	<p>April 26</p>	<p>April 27</p>	<p>April 28</p>	<p>April 29</p> <p>North Am. Partnership for International Birding David Trently david@pibird.com</p>	<p>April 30</p> <p>Quetzal Tours Nick Komar quetzal65@comcast.net N=15</p>
<p>May 1</p> <p>NO VIEWING</p>	<p>May 2</p> <p>NO VIEWING</p>	<p>May 3</p> <p>NO VIEWING</p>	<p>May 4</p> <p>NO VIEWING</p>	<p>May 5</p> <p>NO VIEWING</p>	<p>May 6</p> <p>NO VIEWING</p>	<p>May 7</p> <p>NO VIEWING</p>