AGENDA ITEM or FINAL CONTRACT REVIEW SUBMITTAL FORM

Agenda Item:

Action Requested: Discussion

Parties to the Agreement:

Term Begins: **Term Ends:** **Grant Contract #:**

Summary:

Please see the attached recommendation from the Gunnison Basin Sage-grouse Strategic Committee.

Fiscal Impact:

Submitted by: Katherine Haase for Jim Cochran **Submitter's Email Address:** khaase@gunnisoncounty.org

Finance Review: ○ Required ◉ Not Required

Comments:

Reviewed by: Discharge Date:

County Attorney Review: ◉ Required ○ Not Required

Comments:
ok db 9/4/15

Reveiwed by: GUNCOUNTY1\dBaumgarten Discharge Date: 9/4/2015 Certificate of Insurance Required

Yes ○ No ◉

County Manager Review:

Comments:

Reveiwed by: GUNCOUNTY1\bshelton Discharge Date: 9/4/2015

○ Consent Agenda ○ Regular Agenda ◉ Worksession Time Allotted: 30

Agenda Date: 9/8/2015

Revised April 2015

Waunita Watchable Wildlife Subcommittee Report and Recommendation to the Gunnison Basin Sage-grouse Strategic Committee:

This Subcommittee met on July 2. In attendance:

Greg Peterson, Chair
Peter Caloger, Member
Pat Magee, Member
Matt Vasquez, Member
J Wenum, Member
Jonathan Houck, Member
Nathan Seward, CPW Staff
Jim Cochran, Staff

The Subcommittee reviewed the ***Final Report Gunnison Sage-grouse Watchable Wildlife Program Waunita Lek 2015, Dr. Patrick Magee and Daniel Joseph Schneider (Report).***

The Subcommittee also reviewed the lek count protocols used by CPW. They discussed how lek use polygons change and how this is addressed by CPW.

The "traditional lek" in the meadow appears to be the lesser used of three lek use areas: 1) traditional lek; 2) East Ridge use area; 3) North Meadow use area. This is a recent change. At this time it is unknown if these are separate leks or part of a lek complex.

The Traditional Lek was not used in a reliable or consistent manner in 2015. Only a few birds were viewed passing through the lek over the entire season. The East Ridge use area was used predictably throughout the 2015 lekking season. The North Meadow use area was used consistently but varied in grouse locations and viewing opportunities (Report, 2015). It should be noted that in 2014 the area immediately west of the traditional lek site was inundated with water during much of the lek season due to high flows in the creek. The extent of this impact is unknown in relation to changes in grouse use in 2014 and 2015.

The Committee discussed, among other issues, being consistent, educational benefits of the Watchable Wildlife site and the extra-ordinary efforts of Sisk-a-dee and WSCU in operating the site, and the roll the USFWS has in conservation and management of the grouse. The latter was of considerable concern to the Subcommittee as the USFWS now has regulatory authority over the Gunnison Sage-grouse but does not have a formal member on the Strategic Committee nor has participated in a meaningful discussion on the continued operation of this Watchable Wildlife Site. Two USFWS staff did visit the site this spring.

Acknowledging the need for a controlled opportunity to view Gunnison sage-grouse, and for the continuation of the considerable educational efforts provided at this site, The Waunita Watchable Wildlife Subcommittee makes the following recommendations to the Gunnison Basin Sage-grouse Strategic Committee. These recommendations, if adopted, are intended to be forwarded to the responsible entity as noted:

1. Reduce Site operations to 5 days a week in 2016 (it has been open 7 days previously) (**CPW, Sisk-a-dee**)
    a. Work to accommodate current reservations for the 2016 season within this transition to a 5 day/week schedule. This may mean a non-consistent 5 day/week schedule in 2016. (**Sisk-a-dee**)
    b. Begin a specific 5 day/week schedule in 2017. Schedule shall be 5 continuous days open, 2 continuous days closed. (**CPW, Sisk-a-dee**)

2. Monitor human (lek viewing) response during the 2 closed days. (**Sisk-a-dee, CPW**)

3. Close Gunnison County road 887 to parking for a minimum period of March ~~15~~ 1 (at recommendation of the USFWS) to May 15 for a distance to be determined in consultation with CPW and Sisk-a-dee (Dr. Pat Magee). (**Gunnison County**)

4. Provide additional signage at the site noting that lek viewing outside of the established Watchable Wildlife Site and associated protocols is harmful to the grouse. (**Gunnison Basin Sage-grouse Strategic Committee, CPW, Sisk-a-dee,**)

5. No minimum grouse male attendance threshold for this lek complex be established at this point in time. (**CPW, Gunnison Basin Sage-grouse Strategic Committee**)

6. The Strategic Committee review the Waunita Watchable Wildlife Site Final Report annually and take any action (in the form of recommendations to the appropriate entity) deemed necessary. (**Gunnison Basin Sage-grouse Strategic Committee**)

7. (*added by motion of the Committee to the six recommendations provided by the Subcomm*ittee) Establish a fee collection station for collection of voluntary fees for use of the site and viewing the grouse.

Gunnison Sage-grouse Watchable Wildlife Program

Photo by Gerrit Vynn

Final Report
Gunnison Sage-grouse Watchable Wildlife Program
Waunita Lek
2015

Dr. Patrick Magee and Daniel Joseph Schneider
Sisk-a-dee
and
Department of Natural and Environmental Sciences
Western State Colorado University
Gunnison, CO 81231
May 2015

Gunnison Sage-grouse Watchable Wildlife Program
Waunita Lek Viewing
2015 Summary

Western State 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 2015. The program included four major goals. First, we provided opportunities for individuals and groups to view the Gunnison Sage-grouse, including the coordination of commercial grouse viewing groups. Secondly, we promoted education and awareness regarding the conservation of the Gunnison Sage-grouse through two free tours and evening slide programs open to the public. Third, the Waunita Watchable Wildlife Site was monitored to encourage visitors to adhere to the viewing protocol. 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. Daniel Joseph Schneider served as the 2015 coordinator from Western for the monitoring effort, and also prepared the final report.

Fifteen volunteers monitored the Waunita Watchable Wildlife Site from 1 April to 10 May (40 days). Volunteers spent 61 volunteer days and 211 hours monitoring Gunnison sage-grouse. Volunteers were present at the lek 39 days out of the 40-day period, and were also present at two orientation dates (31 March and 1 April). Volunteers did not monitor the site on 17 April due to unsafe driving conditions resulting from a blizzard. Including the two training phases, volunteer effort exceeded 216 hours in 62 volunteer days. The first training phase was held at Western State Colorado University on 31 March 2015. Volunteers learned basic lek ecology associated with Gunnison sage-grouse and were introduced to the watchable wildlife program with emphasis on their role as lek monitors and visitor guides. They also learned how to properly fill out data forms and what to expect from the grouse and visitors. The second training phase was held on 1 April 2015. Volunteers visited the Waunita Watchable Wildlife Site early in the morning as a practice run for their individual efforts and were able to develop a search image for the grouse and learn how to count them (timing, strategy). In addition to the volunteer hours associated with lek activities, Daniel Joseph Schneider invested approximately 300 hours coordinating commercial group visits, coordinating and training volunteers, preparing and giving presentations, analyzing data, writing a daily blog and preparing the report for the Watchable Wildlife Program. Pat Magee expended approximately 60 hours on supervision, communicating with the public (Sisk-a-dee inquiries), hosting one educational program (the second program did not occur due to lack of attendance), and guiding groups to the lek, maintaining the Siskadee.org webpage and reviewing the final report. A total of 571 volunteer hours were contributed to the Gunnison sage-grouse monitoring effort in 2015 at the Waunita lek.

True visitors (visitors not affiliated with Sisk-a-dee, CPW or Western) were present 30 of 39 days the site was monitored (77% of the days within the viewing season). Including the volunteers, there were 370 visitors to the lek in 2015, which is 13 more than in 2014. Of the 370 total visitors, 71 were volunteers and 299 were true visitors. During the 2015 viewing season, approximately 182 true visitors viewed from the trailer, whereas 117 visitors viewed from the parking lot. The watchable wildlife-viewing trailer was used by 15 groups in 2015. Of these, 13 were commercial or non-profit groups. On average, 7.6 true visitors were present at the site per day. A total of 133 vehicles were present at the watchable wildlife site throughout the 2015 viewing season. Volunteer vehicles accounted for 42 of the total vehicles. The highest counts were 8 vehicles on 6 and 7 April. The highest number of true visitor vehicles was 8 vehicles on 7 April (Volunteers rode with tour group). An average of 3.4 total vehicles was present per day at the Watchable Wildlife Site, with an average of 2.3 true visitor vehicles present per day. Visitors

came from twenty-two states in the United States and four countries outside the United States, including Canada, England, Germany, and Belgium.

Fifteen different organizations or groups visited the Waunita lek during the 40-day viewing season; two visited more than once. Eleven groups were commercial, two were private, and one was an Audubon Chapter from Connecticut. Further, Sisk-a-dee organized two free tours for the general public, but only one was conducted as a result of low attendance. Two commercial groups made two trips each during the 2015 viewing season. One group viewing was cancelled the day of the reservation due to poor visibility and road conditions and one rescheduled the following day. Five other groups cancelled before and during the season without coming to Gunnison.

Grouse counts for 2015 showed variation yet counts in the low 20's were recorded regularly. Patterns of Gunnison sage-grouse distribution and behavior in 2014 changed in comparison to past years and this pattern continued and intensified during the 2015 season. These changes resulted in new counting strategies and data sheets for 2015. In general, the traditional lek was abandoned with only a lone female and a few males being observed on a few occasions throughout the season near the corral area just north of the traditional lek boundary. Although male Gunnison sage-grouse largely avoided the traditional lek they consistently displayed on the East Ridge lek and North Meadow lek. The birds were difficult to see without the use of a spotting scope, which made it difficult for visitor that did not have the proper equipment to view the birds. The grouse were much farther away from the viewing trailer and the parking area at these new lek locations and therefore activity at the parking lot had a lower impact on the behaviors and presence of the grouse on the lek. Therefore, we relaxed some of the previous protocols for viewing and allowed visitors to step outside their vehicles after volunteers indicated that no grouse were present at the traditional lek. By doing so, volunteers were able to help visitors spot the grouse in their new locations and visitors were able to set up their tripods outside their vehicles. Flush events, accurate count numbers and predator interactions were not easily recorded and much of the lekking events for 2015 were unobservable from the viewing area. The flush data for 2015 is an approximation of what may have actually occurred at the Waunita site. The majority of the flush events was recorded as unknown cause and could represent inter-lek movement.

The high count for males was 28 on 21 April 2015. Females peaked at 4 on 3 May 2015. The high count when all individuals were of known sex was 29 on 21 April 2015. The total high count for both male and female plus individuals of unknown sex was 41 on 8 May 2015. Gunnison sage-grouse flushed from all three Waunita lek locations combined an average of 11.9 minutes after sunrise. In 2014, flushing time averaged 33 minutes after sunrise, but in previous years the trend had been toward earlier flushing times making viewing difficult in low light conditions. Flush events were often unknown and unclear if part of disturbance or apart of inter-lek movement. Grouse in the North Meadow tended to flush earlier than birds on the East Ridge and often the meadow grouse flew to the ridge. Male grouse displayed as late as 8:30 am. Even when grouse were not seen, they may have been out of sight from the viewing area. Of the approximate 17 days the grouse were observed in significant flush events, they flushed before sunrise 29% of the time. Conversely, Gunnison sage-grouse flushed after sunrise on 11 of 17 days (64.7%).

Approximately 72% of flushes were not attributable to any disturbance (Unknown); where as 11% of flushes were attributed to predators; 5% of the flushes were caused by other reasons such as ravens; 11% were related to human disturbances. These data documented disturbances that caused any number of grouse to flush, within the three-lekking areas. It is difficult to say for certain if a full lek flush happened at all during 2015. During the 2015 viewing season, 122 of 133 vehicles (91.7 %) followed the protocol listed on the Sisk-a-dee website. The remaining 11 vehicles (8.3%) did not follow the protocol with 1 group member not following protocols. Of the 65 private vehicles, 10 (15.4%) committed protocol violations. Protocol violations included slamming car doors, walking around, using the bathroom and/or exiting car prior to flush, and arriving late. Because of the distance of the birds no protocol violations at

the viewing area resulted in human grouse disturbance. The only grouse disturbance caused by humans was from cars parked along CR 887 near the North Meadow lek. Although protocol adherence was still documented in the same manner as last year, volunteers relaxed certain protocols once it was determined no grouse were present in the immediate location. This allowed for visitors to set up spotting scopes outside of cars, learn where the birds were located and have the opportunity to use proper viewing equipment. Visitors still needed to arrive 1 hour before sunrise, remain in their cars and leave only when a volunteer gave them permission to do otherwise.

A blog was maintained throughout the 2015 Gunnison sage-grouse viewing season at http://gunnisagegrouse.blogspot.com/ and the blog was linked to the siskadee.org web page. This blog included high count numbers, wildlife sightings, significant weather, grouse behavior and locations of observed grouse. Multiple visitors commented on the blog noting they were following along and used the blog to help them decide to visit the lek.

The Gunnison Basin Sage-grouse Strategic Committee convened a sub-committee in spring 2015 to review the Waunita Watchable Wildlife Program and site issues. A local homeowner adjacent to the Waunita Lek, Jim Mendonca, raised several concerns regarding the long-term sustainability of the site as a lek viewing area. Further, Nate Seward, Wildlife Conservation Biologist with CPW, was concerned with the low lek counts at Waunita from the 2014 season. The lek counts did not reflect the changing distribution of the grouse in the area of Waunita and counters only documented grouse on the traditional lek. The high male count in 2014 on the traditional lek was 7. However, more grouse were present and spread out over the North Meadow and East Ridge. The sub-committee met to discuss whether the 2015 viewing season should continue, be transformed, or cancelled. The sub-committee agreed to continue the lek viewing program in 2015, identify a threshold in grouse numbers that would trigger management changes, and develop further recommendations for 2016 and beyond. Part of the reason to continue the status quo was that the commercial birding groups had already made reservations and scheduled the Gunnison Sage-grouse viewing more than one year in advance. Nate Seward and Pat Magee used CPW and Sisk-a-dee lek count data to determine a low high male count at Waunita and recommended 20 male Gunnison Sage-grouse as the trigger for viewing protocol changes at Waunita. Despite the efforts to adaptively manage the Waunita Watchable Wildlife Program, the grouse themselves shifted locations farther away from people and by doing so, may have reduced the effects of human disturbance on their lekking activities at Waunita. The movement of the birds to these new locations has complicated the viewing program, but the grouse are still observable from the existing site and we recommend the continuation of the viewing program in 2016 under a similar structure that we have used in the past.

In 2016, we plan to focus the management of the Waunita Watchable Wildlife Program on maintaining our ethical viewing opportunity, providing educational services to the public, managing the commercial users, and increasing communication regarding the changes at the site. An important educational objective is to work with Colorado and national birders and organizations to encourage visitors to view grouse from the parking area and/or viewing trailer instead of driving up the county road to try to get a closer look. We recommend that the site not be open for use every day of the week to reduce traffic and activity at key times during the mating season (4 days per week). To monitor lek viewing use, we would station a volunteer at the parking area every morning to quantify compliance to the new rules. We encourage the Strategic Committee to move forward with discussions with Gunnison County to put signage along County Road 887 that disallows parking on the side of the road. We do not support the development of an alternative viewing location and hope we can continue to provide an opportunity for the public to observe the Gunnison Sage-grouse in a manner that does not negatively impact the birds.

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The Waunita Watchable Wildlife Site, located about 20 miles east of Gunnison, Colorado, is one component of the Gunnison Sage-grouse Watchable Wildlife Program. The site is managed by Colorado Parks and Wildlife and the sage-grouse habitat where the lek exists is protected by a conservation easement. Sisk-a-dee cooperates with CPW and coordinates the Watchable Wildlife Program. Photo by Skyler Stanley

Program Effort

Fifteen volunteers, representing Colorado Parks and Wildlife, Sisk-a-dee, and Western State Colorado University (Western), monitored the Waunita Watchable Wildlife Site during the 2015 Season. Fourteen were Western students and one was a Western faculty member.

2015 Volunteer List

	Name	Phone	Email
1	Ronald Crist	970-433-1405	ronald.crist@western.edu
2	Sarah Keith	(719)649-8318	sarah.keith@western.edu
3	Gaige Goll	847-707-9821	ggoll2344@gmail.com
4	Marcel Such	720-255-5853	mpsuch@gmail.com
5	Dustin Miller	970-589-7040	Dustin.miller@western.edu
6	John Kelly	719-659-8849	johnathan.kelley@western.edu
7	Jessica Alberty	719-242-3802	jessica.alberty@western.edu
8	Mady Smith	303-888-5208	madeline.smith@western.edu
9	Joe Busse	970-696-2189	joseph.busse@western.edu
10	Joseph Doyen	712-309-1178	joseph.doyen@western.edu
11	Jocelyn Leroux	970-759-5862	jocelyn.leroux@western.edu
12	Tyler Bryant	720-877-1185	tyler.bryant.western.edu
13	Erin Twaddell	720-563-1427	erin.twaddell@western.edu
14	Dan Schneider	970-685-2056	daniel.schneider@western.edu
15	Pat Magee!	970-641-3959	pmagee@western.edu

Volunteers monitored grouse numbers and human visitation during a 40-day period in the 2015 grouse-viewing season.

- Training Days: 3/31/2015 and 4/1/2015
- First day of monitoring: 3/31/2015
- Last day of monitoring: 5/10/2015

Volunteers monitored the lek for 39 days during the 40-day period (17 April was cancel due to blizzard conditions, otherwise, 100% volunteer attendance).

A total of 81 volunteer days and 263 volunteer hours were recorded at the Waunita Watchable Wildlife Site in 2015 (61 volunteer days and 208 hours without the training day). The first training phase was held the evening of March 31. Training was conducted by Patrick Magee and Dan Schneider of Western and Nick Gallowich, District Wildlife Manager (CPW). Volunteers learned basics of Gunnison sage-grouse reproductive behavior and about the history and components of the Gunnison Sage-grouse Watchable Wildlife Program. Further, they learned how to properly fill out data forms and what to expect from the grouse and visitors. The initial evening training session was followed by a morning visitation to the lek on April 1. Volunteers learned how to identify male and female grouse, where to look for birds and how to count them. In addition, Western volunteer Daniel Schneider contributed 300 hours in coordinating with volunteers and groups, communicating with commercial groups and volunteers, data analysis, and writing the report. Patrick Magee contributed an additional 60 hours in communication with public and commercial groups, presentations, web design, coordination, and reporting. Therefore, approximately 571 total volunteer hours were contributed to the Waunita Watchable Wildlife Program in 2015.

Sisk-a-dee advertised two educational programs on 3-4 and 9-10 April for the general public. The program consisted of an evening slide show on the ecology and conservation of the Gunnison Sage-grouse, followed by a morning lek viewing in the observation trailer. The first program did not have sufficient attendance and was cancelled, whereas the second program had 11 visitors. The events were free and advertised on the Sisk-a-dee webpage; some participants purchased hats, t-shirts, and sweatshirts and made financial donations to the conservation of the Gunnison sage-grouse.

Visitation

Rate of visitation

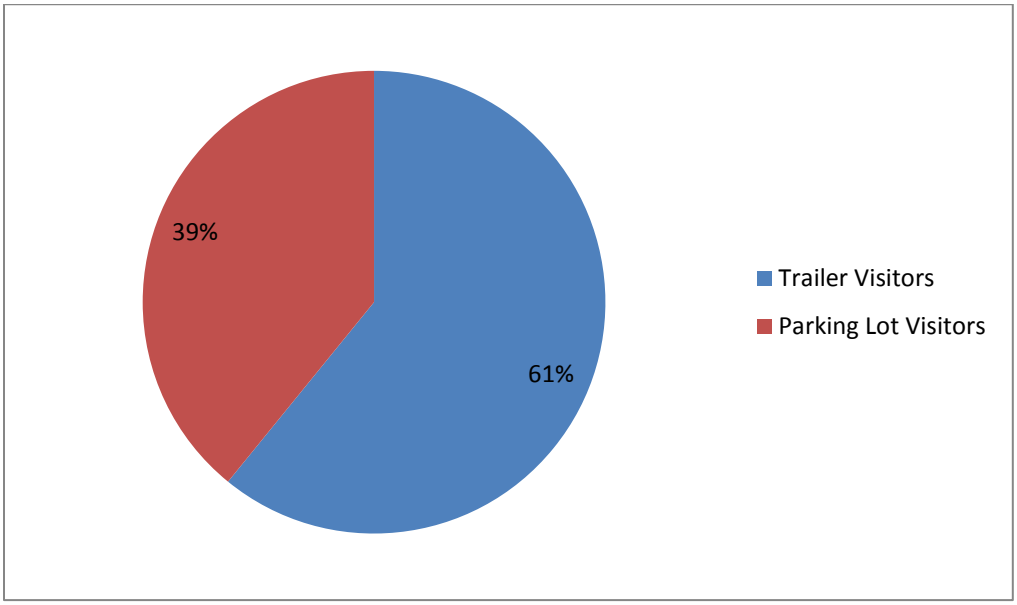
Visitors used the Waunita site on 30 of 39 days, 77% of the days from 1 April to 10 May.

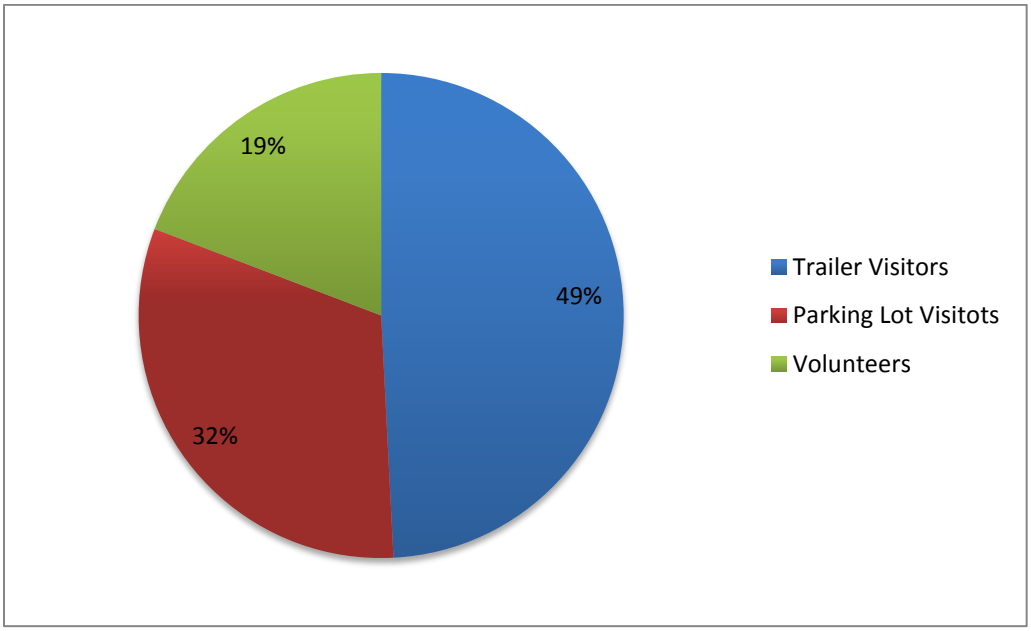
Total number of visitors and vehicles

Visitors	
Total Visitors	370
Total true visitors (total minus volunteers)	299 (80.8%)
Total number of true visitors viewing from trailer	182 (60.9% of true visitors)
Total number of true visitors viewing from parking lot	117 (39.1% of true visitors)
Total number of volunteers on site	71 (19.2%)
Average visitors per day	370/39 = 9.5
Average true visitors per day (minus volunteers)	299/39 = 7.7

2015 Visitor Data

Pie Charts reflect types of users. Top chart represents true visitors only. Bottom chart represents all types of visitors to lek, including Sisk-a-dee/CPW volunteers.





Vehicles

Total number of vehicles	133
Total number of private vehicles in parking lot	65
Total number of tour vehicles (in trailer)	26
Total number of volunteer vehicles	42
Total number of vehicles belonging to true visitors	91
High vehicle count	8 vehicles on 6, 7 April
High true visitor vehicle count	8 visitor vehicles on 7 April (Volunteers rode with tour group)
Average number of vehicles per day	3.4
Average number of true visitor vehicles per day	2.3
Average number of volunteer vehicles per day	1.08

Visitor Geography

Total number of states in U.S.A. represented: 22

Total number of countries outside of U.S.A. represented: 4

U.S. States		**Countries and Provinces**
Arizona	Ohio	Canada (Ontario, Alberta)
California	Oregon	Germany
Colorado	Tennessee	England
Connecticut	Texas	Belgium
Delaware	Utah	
Florida	Washington	
Illinois	Wisconsin	
Indiana		
Maryland		
Michigan		
New Hampshire		
New Jersey		
New Mexico		
New York		
North Carolina		

2015 Waunita Watchable Wildlife Site Gunnison Sage-grouse Visitors						
Sunday	**Monday**	**Tuesday**	**Wednesday**	**Thursday**	**Friday**	**Saturday**
		3/31 **Volunteer Training Day** 10 Volunteers	4/1 **Volunteer Training Day** 10 Volunteers 1 CO 1 Alberta, Canada	4/2 3 Volunteers	4/3 1 Volunteer	4/4 1 TX 2 CO 2 MI Sisk-a-dee Group 1 Volunteers
4/5 2 WI 1 NJ 2 CA 11 UK 2 Volunteers	4/6 3 CO 2 Alberta, Canada 2 NY 1 FL 16 TX 2 Volunteers	4/7 2 OH 1 CT 2 WA 2 TX 2 UK 18 CO 2 Volunteers	4/8 16 AZ 2 Volunteers	4/9 2 AZ 2 NH 2 Volunteers	4/10 2 UK Sisk-a-dee Group 2 Volunteers	4/11 1 CO 16 TX 2 Volunteers
4/12 4 CO 2 IN 7 NC 2 Volunteers	4/13 1 UK 1 Germany 16 AZ 2 Volunteers	4/14 1 WA 2 CO 20 AZ 2 Volunteers	4/15 2 Ontario, Canada 3 CA 10 CO 7 CT 3 Volunteers	4/16 1 CO 8 UK 2 Volunteers	4/17 Canceled Volunteers did not monitor lek due to hazardous driving conditions	4/18 2 Belgium 1 NJ 16 TX 2 Volunteers
4/19 2 CO 1 CA 1 Volunteer	4/20 2 IL 2 DE 2 Volunteers	4/21 10 UK 2 MI 2 CO 2 Volunteers	4/22 2 IL 1 UK 10 CO 2 Volunteers	4/23 1 UT 7 TN 2 Volunteers	4/24 1 MD 2 Volunteers	4/25 2 CA 2 CO 1 Volunteer
4/26 2 UK 1 CO 1 Volunteer	4/27 1 CO 1 Volunteer	4/28 1 OR 1 Volunteer	4/29 3 CO 1 Volunteer	4/30 2 NM 1 Volunteer	5/1 1 Volunteer	5/2 2 CO 1 Volunteer
5/3 1 Volunteer	5/4 1 FL 2 Volunteers	5/5 1 Volunteer	5/6 1 Volunteer	5/7 1 Volunteer	5/8 1 TX 1 Volunteer	5/9 1 Volunteer
5/10 1 Volunteer						

Group Visits

Fourteen organized groups reserved the Waunita Watchable Wildlife Site trailer during the 40-day viewing season.

The trailer was occupied by groups on 17 out of the 39 days

Total group user days was 17

Total number of groups: 15 (including non-profits (2), commercial groups (11), and non-commercial, private groups (2)

2 non-profit educational, environmental, or bird clubs

11 commercial birding groups

2 non-commercial private groups

Commercial groups used the trailer 12 times

2 of 11 commercial groups used the site multiple times

Non-profit groups used the trailer 3 times

Private, non-commercial groups used the trailer 2 times

Type of Group	Group Name	Number of Uses
Non-profit	Sisk-a-dee	2*
	CT Audubon	1
Commercial	Quetzel Bird Tours	1
	Victor Emmanuel Nature Tours	1
	Field Guides Incorporated	2
	High Lonesome Bird Tours	2
	Birdquest	1
	Partnership For International Birding	1
	Venture Birding Tours	1
	WINGS Birding Tours	1
	Wild Wings	1
	Otus Asio Tours	0 (Canceled)
	Birding Abroad	1
Private	Mike Henwood	1
	Robert Mertz	1
Total User Days		17

*While the 3-4 April tour was cancelled, the trailer was open that morning at the site and the public were invited to use the trailer with Dr. Magee assisting them in viewing the grouse.

Protocol Violations

Vehicles (numbers and percentage) following proposed grouse viewing etiquette

Vehicles following protocol:	122 out of 133 (91.7%)
Vehicles not following protocol:	11 out of 133 (8.3%)

Of the 91 vehicles belonging to true visitors, 11 (12%) violated viewing protocol

Of the 26 tour vehicles, 1 (3.8%) violated viewing protocol

Of the 65 private vehicles, 10 (15.4%) violated viewing protocol

Of the 42 volunteer vehicles, 0 (0%) violated viewing protocol

Annually, Sisk-a-dee hosts free presentations and lek viewing opportunities for the general public. Shown here, visitors admire Gunnison Sage-grouse mating on lek. Photo by Jeff Gordon.

Gunnison Sage-grouse Lek Counts and Disturbances

Grouse Counts

2015 High Grouse Counts

High count males:	**28 Males, 4/21/2015**
High count females:	**4 Females, 5/3/2015**
High count males and females:	**29 Total Grouse, 4/21/2015**
High count, male, female and unknown:	**41 male, female, unknown, 5/8/2015**

2014 High Grouse Counts

High count males:	19 Males, 4/5/2014
High count females:	14 Females, 4/11/2014
High count males and females:	44 Total Grouse, 4/8/2014

2013 High Grouse Counts

High count males:	31 Males, 4/2/2013
High count females:	20 Females, 4/7/2013
High count males and females:	37 Total Grouse, 4/2/2013

2012 High Grouse Counts

High count males:	22 Males, 4/6/2012
High count females:	12 Females, 4/1/2012
High count males and females:	25 Total Grouse, 4/1/2012

2011 High Grouse Counts

High count males:	27 Males, 4/2/2011
High count females:	30 Females, 4/5/2011
High count males and females:	51 Total Grouse, 4/5/2011

2010 High Grouse Counts

High count males:	32 Males, 5/3/2010
High count females:	42 Females, 4/10/2010
High count males and females:	74 Total Grouse, 4/10/2010

2009 High Grouse Counts

High count males:	29 Males, 4/19/2009
High count females:	25 Females, 4/8/2009
High count males and females:	53 Total Grouse, 4/6/2009

2008 High Grouse Counts

High count males:	37 Males, 4/5/2008
High count females:	33 Females, 4/18/2008
High count males and females:	63 Total Grouse, 4/16/2008

2007 High Grouse Counts

High count males:	34 Males, 5/8/2007
High count females:	12 Females, 4/14/2007 and 3/30/2007
High count males and females:	40 Total Grouse, 5/8/2007

2006 High Grouse Count

High count males:	38 Males, 5/2/2006
High count females:	26 Females, 4/9/2006
High count males and females	52 Total Grouse, 4/5/2006

2005 High Grouse Count

High count males:	30 Males, 4/30/2005
High count females:	27 Females, 4/7/2005
High count males and females:	37 Total Grouse, 4/7/2005

Grouse Flushes and Disturbances

Average Total Lek Flush Time

Average flush time	21 min. after/14 min. before sunrise
Earliest flush time	05/07/2015 at 0554
Longest duration of time grouse flushed before sunrise	04/19/2015, 26 minutes before sunrise
Latest flush time	04/05/2015 at 0750 (lone female from ML)
Longest duration of time grouse flushed after sunrise	04/05/2015, 63 minutes after sunrise
Frequency of days grouse flushed before sunrise	5/17 (29%)
Frequency of days grouse flushed after sunrise	11/17 (64.7%)
Frequency of days grouse flushed at sunrise	1/17 (5.8%) (1 minute after sunrise)

Cause of Single, Multiple, or Entire Lek Flush

Unknown/no disturbance	13	72%
Weather	0	0%
Coyotes	2	11%
Golden Eagle (Other Birds of Prey)	0	0%
Other (horses, jackrabbits, elk, ravens)	1	5%
Human related disturbances (Parked on CR 887)	2	11%

All potential disturbances to the grouse*

Coyotes howling or on lek	29	29%
Bird of Prey	14	14%
Human (outside vehicle, lights on lek, drive by)	43	43%
Weather (snow)	2	2%
Other (Horse whinny, unknown animal, raven)	12	12%
Total potential disturbances	**100**	

All human related potential disturbances*

Car doors slamming (includes getting out of car)	11	25%
Car idling	4	9%
Left site early	3	7%
Arrive at site late	2	4%
Talking in car, beeping, coughing, or moving	5	11%
Use bathroom	1	2%
Car horn in parking lot	2	4%
Vehicle drove by on County Road 887	10	23%
Vehicle parked on CR 887 for grouse	3	7%
Other (Lights on lek, highway noises)	2	4%
Total human related disturbances	**43**	

*Potential disturbances did not necessarily lead to a response by sage-grouse

Waunita Watchable Wildlife Site Summary Statistics: 2004 – 2015

Statistic	2004	2005	2006	2007	2008	2009	2010	2011	2012
High Count Males	17	30	38	34	37	29	32	27	22
High Count Females	19	27	26	12	33	25	42	30	12
High Count Males and Females	30	37	52	40	63	53	74	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 Flushed Before Sunrise (out of total monitored days)	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 (out of total monitored days)*	**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 (not including volunteers); % of total vehicles that belonged to monitors		**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 represented	2	4	3	5	5	5	6 including 5 Canadian provinces	9 including 3 Canadian provinces	4

Statistic	2013	2014	2015						
High Count Males	31	19	28						
High Count Females	20	14	4						
High Count Males and Females	37	44	41						
Days Grouse Present at lek	39/40	**20/40****	39/39***						
Days Flushed Before Sunrise (out of total monitored days)	35/40 87.5%	**6/20 30%**	5/39 12.5%						
Days Flushed by Humans (out of total monitored days)	**2/40 5%**	**3/20 15%**	**2/39**						
Human Totals (including volunteers)	311	357	370						
Visitor Totals (not including volunteers)	**233**	**297**	**299**						
Vehicle Totals (including groups and monitors)	173	133	133						
Vehicle Totals (not including volunteers); % of total vehicles that belonged to monitors	**118; 31.7%**	**75; 43.6%**	**91; 31.5%**						
Days at Least One Visitor at Site (out of total monitored days)	**35/40**	**28/40**	**30/39**						
Percent of Total Cars that Violated Protocol	**10.2%**	**3%**	**8.3%**						
Number of U.S. States represented	27	23	22						
Number of Countries represented	9	5	4						

*Shaded cells represent highest values recorded since 2004
** This value represents the percent of days the grouse used the traditional lek site, they were present most days in new locations
***This value represents grouse present at all three lek locations: North Meadow, East Ridge, Main lek

Waunita Watchable Wildlife Site

The photo below provides an overview of the main geographic features of the Waunita Watchable Wildlife Site. Beginning in 2014, Gunnison Sage-grouse begin moving away from the traditional lek and moved north in the meadow and east on to the sagebrush covered ridge. In the 2015 the grouse had mostly abandoned the traditional lek but actively displayed in the North Meadow and East Ridge locations. While the grouse are much further away from the viewing area, the birds are still observable from the parking lot and the viewing trailer. Visitors must use spotting scopes to observe the grouse.

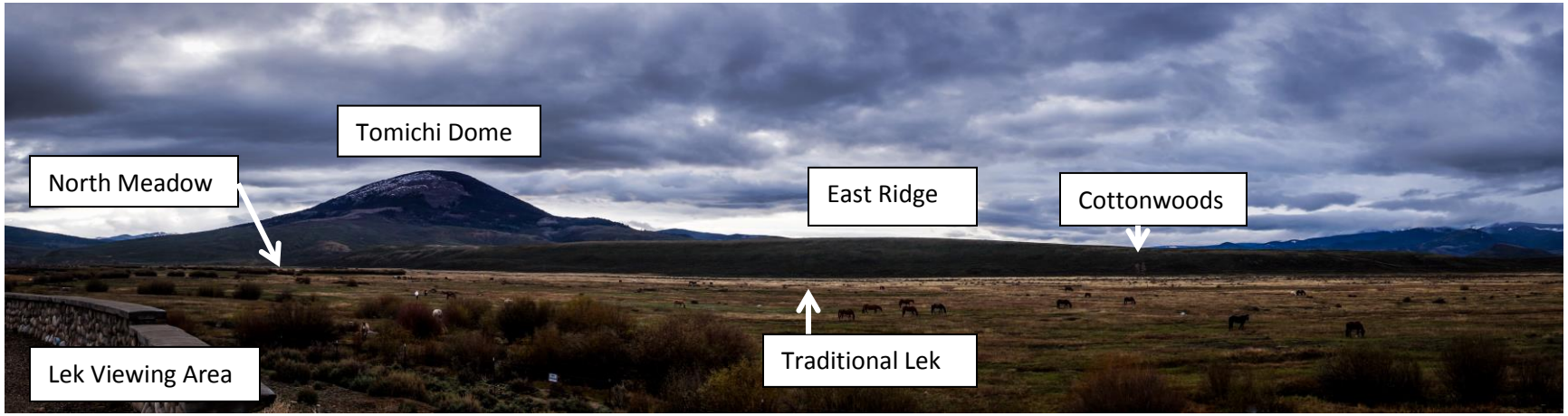


Photo by Skyler Stanely

Summary of Lek Disturbances (Waunita Watchable Wildlife Site, 2015)

Date	Disturbances	Flush to Sunrise	Weather
4/1	0630– visitor out of car, none 0700- car left early, none 0731- 2 cars drove by North Meadow, flushed 17 No predators observed, coyote howl	17 flushed at 0731, 38 minutes after sunrise, cars	32ºF 30% Cloud Cover Wind Speed: Calm Precipitation: none
4/2	0540- I SUV parked on CR 887 near North Meadow, None No predators 0705 – 4 flushed, unknown	4 flushed at 0705 in North Meadow, 14 minutes after sunrise, unknown	34.3ºF 40% Cloud Cover Wind Speed: light No precipitation Waxing Gibbous
4/3	None from visitor Red-Tail Hawk on H-post, none	None observed	20.5ºF 20% Cloud Cover Wind Speed: calm No precipitation
4/4	None from visitor 0645 - Coyote, Rough–legged Hawk NM, unknown	1 flushed at 0645 in NM 3 minutes before sunrise, unknown	10ºF 0% Cloud Cover Wind Speed: calm No precipitation
4/5	0520 – car alarm, none 0556 – door slam, use bathroom, none 0645 – Coyote, none 0655 – Golden Eagle on ER, none 0738 - Rough-legged hawk, none	2 flushed at 0714, 27 minutes after sunrise; unknown 1 flushed 0750 from ML, 63 minutes after sunrise, unknown	27ºF 10% Cloud Cover Wind Speed: light No precipitation
4/6	None from visitor 0600 – dog barking 0616 – coyote, none 0653 – coyote, unknown	6 flushed at 0630, 15 minute before sunrise, unknown	30ºF 40% Cloud Cover Wind Speed: calm No precipitation
4/7	0515 – left early, none 0540 – 1 car parked on CR 887 near North Meadow, None known 0650 – coyote, none	None observed, only grouse movement within lek	27ºF 10% Cloud Cover Wind Speed: Calm No precipitation
4/8	0700 – 2 cars drove by, none 0659 – Ravens, 5 flushed 0705 – Rough-legged hawk	5 flushed at 0659 17 minutes after sunrise, ravens	27.7ºF 0% Cloud Cover Wind Speed: 5 mph No precipitation
4/9	0625 – car horn, none 0515- coyotes, none	None observed	18ºF 40% Cloud Cover Wind Speed: Calm No precipitation

4/10	0653- car arrived late, none 0655- care left early, none 0700- care engine running, none No predators 0631- Ravens	None Observed	25ºF 15% cloud cover Wind Speed: Calm No precipitation
4/11	None from visitor 0545 – coyotes NM	None Observed	28.9ºF 0% Cloud Cover Wind Speed: Calm No precipitation
4/12	0652- group member left trailer, none 0712- 2 trucks drove by, none 0700- engine running 0515 – coyotes howling	None Observed	26.7ºF 0% Cloud Cover Wind Speed: Calm No precipitation
4/13	0545- car lights on lek No predators	None Observed	25ºF 0% Cloud Cover Wind Speed: None No precipitation
4/14	0700- door slam, walk around, none 0715- car horn, none 0654 – Swainson's hawk, none 0713 – Red-Tail Hawk, none	Flushed at 0650 17 minutes after sunrise, unknown	26ºF 0% Cloud Cover Wind Speed: calm No precipitation
4/15	0655- left early, door slam, none 0512- coyotes howling	2 Flushed at 0650 18 minutes after sunrise, unknown	38 to 30ºF 80% Cloud Cover Wind Speed: 5 to 25 mph varied gust None to light snow/rain
4/16	None from visitor No predators	None Observed	27ºF 100% Cloud Cover Wind Speed: 5-10 mph Snowing
4/17	Canceled	None	22ºF 100% Cloud Cover Wind Speed: 5 -10 mph Moderate snow fall Very low visibility
4/18	Engine running, loud talking 0550- coyotes on ER, none	None Observed	22.2ºF 70% Cloud Cover Wind Speed: 5 mph None to light snow
4/19	0700- door slam, arrived late, walked around 0620- coyotes howling	3 flushed at 0600 26 minutes before sunrise, unknown	25ºF 60% cloud cover Wind Speed: Calm No precipitation
4/20	None from visitor No predators	2 flushed 0626, 1 minute after sunrise, unknown	30ºF 90% Cloud Cover Wind Speed: Calm Light snow
4/21	0500- 2 door slams, none 0605 – coyote, 1 flushed near ML 0700 – Golden eagle NM, none	1 Flushed at 0605, 19 minutes before sunrise from coyote	28.3ºF 5% Cloud Cover Wind Speed: Calm No precipitation

4/22	None from visitor 0520- coyote howling 0652- coyote	None observed	30ºF 0% Cloud Cover Wind Speed: calm No precipitation
4/23	None from visitor Coyotes howling	8 flushed 0703, 42 minutes after sunrise, unknown, no disturbance	29ºF 0% Cloud Cover Wind Speed: 5 mph No precipitation
4/24	None from visitor 0538 – coyote ML	None observed	19ºF 50% Cloud Cover Wind Speed: Calm None to light snow
4/25	None from visitor No predators	None Observed, lek movement	28ºF 60% Cloud Cover Wind Speed: calm Light snow
4/26	None from visitor Coyote howling	None observed	33ºF 60% Cloud Cover Wind Speed: 10 mph No precipitation
4/27	None from visitor No predators	None observed	32ºF 40% cloud cover Wind Speed: calm No precipitation
4/28	0630 – 0700- 3 cars drove by, none 0545 – Raptor on H-post	None observed	29.5ºF 0% Cloud Cover Wind Speed: 5 mph No precipitation
4/29	None from visitor No predators	None observed	32ºF 0% Cloud Cover Wind Speed: calm No precipitation
4/30	None from visitor No predators	None observed	34ºF 0% Cloud Cover Wind Speed: 5 mph No precipitation
5/1	None from visitor No predators	None observed	35ºF 5% Cloud Cover Wind Speed: Calm No precipitation
5/2	0450- engine running, lights on lek, door slam, none Horse present No predators	None observed	36ºF 100% Cloud Cover Wind Speed: light to calm No precipitation
5/3	0615- 1 car dove up to trailer, were parked .7 miles up CR 887 by North Meadow, 2 grouse flushed, unknown 0615 – Rough-legged hawk NM, none Horses present	None observed 0615- car said two flushed when left road by NM, 7 minutes after sunrise	33ºF 25% Cloud Cover Wind Speed: Calm No precipitation

5/4	None from visitor 0645 – Mink by creek No predators Horses present	None observed	35ºF 100% Cloud Cover Wind Speed: Calm Light rain
5/5	None from visitor No predators Horses present	None observed	38.8ºF 100% Cloud Cover Wind Speed: Calm Light rain
5/6	None from visitor 0618 – coyote in ML, none Horses	None observed	43ºF 100% Cloud Cover Wind Speed: calm Light rain
5/7	None from visitor Horses 0610- coyote in NM	6 flushed 0554 10 minutes before sunrise, unknown	37ºF 100% Cloud Cover Wind Speed: Calm No precipitation
5/8	None from visitor Horses 0545 – coyote, none 0555 – coyote, none 0610 – 2 coyotes, none 0620 – coyote, unknown 0630- Rough-legged hawk	12 Flushed at 0610, 7 minutes after sunrise, unknown	34ºF 15% Cloud Cover Wind Speed: light to calm No precipitation
5/9	None from visitor 0625 – Northern Harrier, none 0705 – coyote, none 0710 – car, none Horses	1 flushed at 0615, 13 minutes after sunrise, unknown	34 to 32ºF 20% Cloud Cover Wind Speed: 5 to 15 mph No precipitation, snow night before
5/10	None from visitor Horses 0540- 2 coyotes, none 0600- Northern Harrier, none 0615 – coyote, 4 flushed 0635 – immature Red-tail Hawk, none	4 flushed at 0615, 14 minutes after sunrise, due to coyote	31ºF 100% Cloud Cover Wind Speed: Calm No precipitation, frosty

Waunita Watchable Wildlife Site Daily Lek Statistics
2015

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
			April 1 **0654** **Training Day** Male High Count: 23 Female High Count: 0 Unknown High Count: 17 Flush: 0731 Reason: 2 cars People: 14 Vehicles: 5	**April 2,** **0653** Male High Count: 7 Female High Count: 0 Unknown High Count: 5 Flush: 0705 Reason: unknown People: 3 Vehicles: 1	**April 3** **0652** Male High Count: 21 Female High Count: 0 Unknown High Count: 1 People: 1 Vehicles: 1	**April 4** **0649** Male High Count: 18 Female High Count: 0 Unknown High Count: 2 Flush: 0645 Reason: unknown People: 7 Vehicles: 5
April 5, **0647** Male High Count: 15 Female High Count: 1 Unknown High Count: 2 Flush: 0714, 0750 Reason: unknown People: 17 Vehicles: 4	**April 6** **0646** Male High Count: 22 Female High Count: 2 Unknown High Count: 8 Flush: 0630 Reason: unknown People: 26 Vehicles: 8	**April 7** **0644** Male High Count: 20 Female High Count: 1 Unknown High Count: 0 People: 30 Vehicles: 8	**April 8** **0643** Male High Count: 21 Female High Count: 0 Unknown High Count: 7 Flush: 0659 Reason: ravens People: 18 Vehicles: 3	**April 9** **0641** Male High Count: 6 Female High Count: 1 Unknown High Count: 2 People: 8 Vehicles: 3	**April 10** **0640** Male High Count: 21 Female High Count: 1 Unknown High Count: 0 People: 18 Vehicles: 8	**April 11** **0638** Male High Count: 21 Female High Count: 0 Unknown High Reason: 0 People: 19 Vehicles: 5
April 12 **0637** Male High Count: 23 Female High Count: 1 Unknown High Count: 0 People: 15 Vehicles: 4	**April 13** **0635** Male High Count: 22 Female High Count: 2 Unknown High Count: 3 People: 20 Vehicles: 5	**April 14** **0634** Male High Count: 21 Female High Count: 2 Unknown High Count: 2 Flush: 0650 Reason: unknown People: 26 Vehicles: 6	**April 15** **0632** Male High Count: 18 Female High Count: 0 Unknown High Count: 2 Flush: 0650 Reason: unknown People: 27 Vehicles: 7	**April 16** **0631** Male High Count: 7 Female High Count: 0 Unknown High Count: 6 People: 11 Vehicles: 3	**April 17** **0629** Canceled	**April 18** **0628** Male High Count: 18 Female High Count: 1 Unknown High Count: 0 People: 21 Vehicles: 6
April 19 **0627** Male High Count: 17 Female High Count:0 Unknown High Count: 5 Flush: 0600 Reason: unknown People: 4 Vehicles: 3	**April 20** **0625** Male High Count: 13 Female High Count: 2 Unknown High Count: 2 Flush: 0626 Reason: unknown People: 6 Vehicles: 3	**April 21** **0624** Male High Count: 28 Female High Count: 1 Unknown High Count: 1 Flush: 0605 Reason: coyote People: 16 Vehicles: 6	**April 22** **0623** Male High Count: 20 Female High Count:0 Unknown High Count: 0 People: 15 Vehicles: 5	**April 23** **0621** Male High Count: 7 Female High Count: 1 Unknown High Count: 8 Flush: 0703 Reason: unknown People: 10 Vehicles: 4	**April 24** **0620** Male High Count: 11 Female High Count: 2 Unknown High Count: 5 People: 3 Vehicles: 1	**April 25** **0619** Male High Count: 12 Female High Count: 1 Unknown High Reason: 0 People: 6 Vehicles: 4

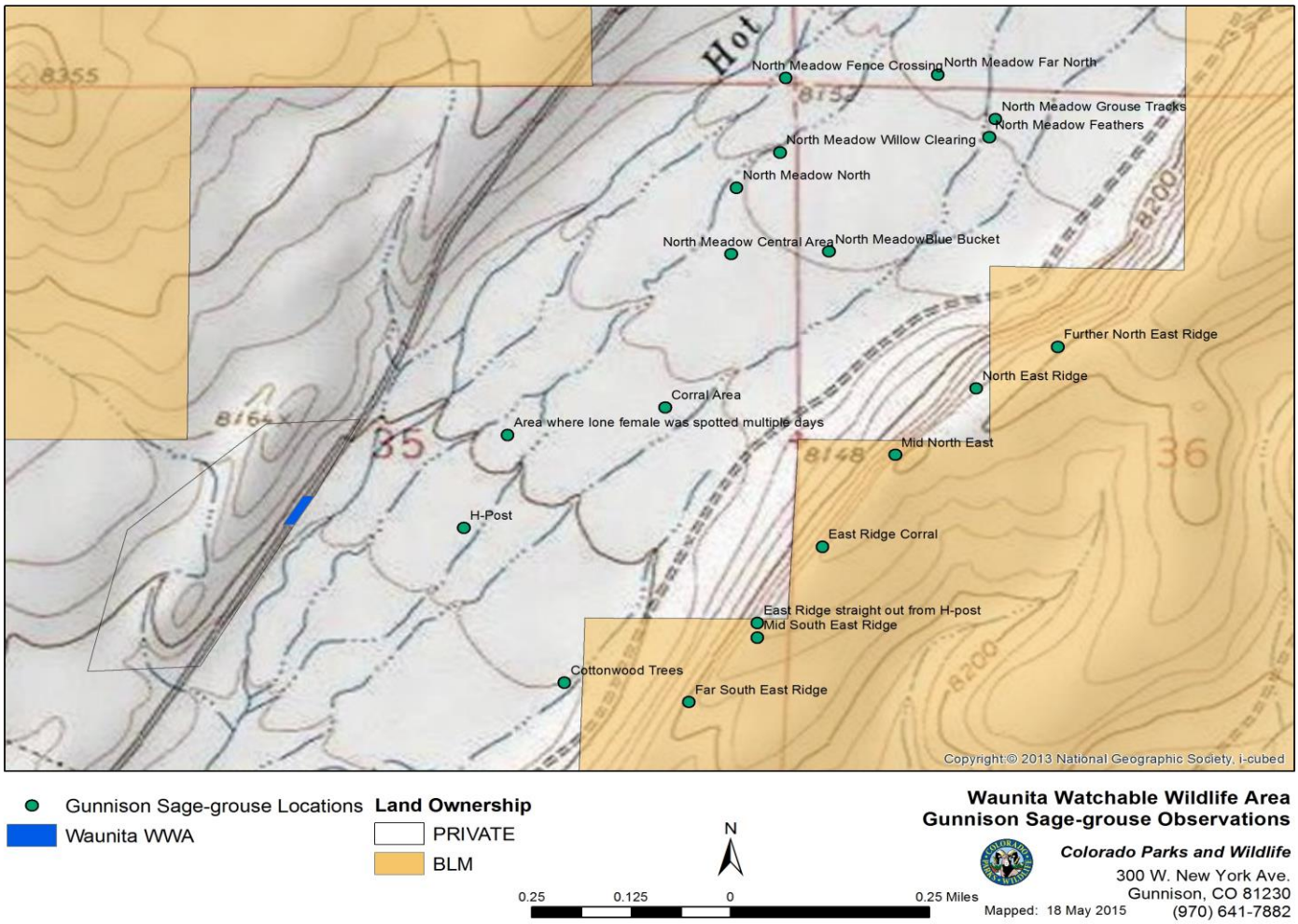
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
April 26 **0617** Male High Count: 25 Female High Count: 1 Unknown High Count: 2 People: 4 Vehicles: 3	**April 27** **0616** Male High Count: 10 Female High Count: 1 Unknown High Count: 0 People: 2 Vehicles: 2	**April 28** **0615** Male High Count: 26 Female High Count: 2 Unknown High Count: 0 People: 2 Vehicles: 2	**April 29** **0614** Male High Count: 22 Female High Count: 1 Unknown High Count: 1 -People: 4 Vehicles: 3	**April 30** **0613** Male High Count: 11 Female High Count: 0 Unknown High Count: 0 People: 3 Vehicles: 2	**May1** **0611** Male High Count: 17 Female High Count :0 Unknown High Count: 2 People: 1 Vehicles:1	**May2** **0610** Male High Count: 18 Female High Count: 0 Unknown High Count: 2 People: 3 Vehicles: 2
May3 **0609** Male High Count : 15 Female High Count: 4 Unknown High Count: Flush: 0615 Reason: car People:1 Vehicles: 1	**May 4** **0608** Male High Count: 15 Female High Count: 0 Unknown High Count: 0 People: 3 Vehicles: 2	**May 5** **0606** Male High Count: 14 Female High Count: 0 Unknown High Count: 1 People: 1 Vehicles: 1	**May 6** **0605** Male High Count: 3 Female High Count: 0 Unknown High Count: 1 People: 1 Vehicles: 1	**May 7** **0604** Male High Count: 10 Female High Count: 0 Unknown High Count: 0 Flush: 0554 Reason: unknown People: 1 Vehicles: 1	**May 8** **0603** Male High Count: 24 Female High Count: 1 Unknown High Count: 16 Flush: 0610 Reason: unknown People: 2 Vehicles: 2	**May 9** **0602** Male High Count: 16 Female High Count: 0 Unknown High Count: 1 Flush: 0615 Reason: unknown People: 1 Vehicles: 1
May 10 **0601** Male High Count: 12 Female High Count: 3 Unknown High Count: 4 Flush: 0615 Reason: coyote People: 1 Vehicles:1						

Photo by Patrick Magee!

Gunnison Sage-grouse Watchable Wildlife Program
Discussion and Recommendations for 2015

Gunnison Sage-grouse Use

In 2015, Gunnison sage -grouse continued their movement away from their traditional lek that began in 2014. On two occurrences a single female passed through the traditional lek and on multiple occasions several males were spotted by the corral area to the north of the traditional lek, but still off the historic site. Aside from these few occurrences the grouse did not use the traditional lek in 2015. The general use areas in 2015 are represented in a map (see below) developed by CPW biologist Nate Seward. Dan Schneider collected UTM locations based on his observations from the viewing area from 1 April to 10 May. Aside from the traditional lek, grouse were reliably and predictably present on either the East Ridge or North Meadow. Without spotting scopes viewing the grouse was difficult, but with the aid of optical equipment male displays, wing fights, predator interactions, and male and female identification were possible.



Why the grouse moved away from the traditional lek is not fully understood but likely was influenced by the continued daily human presence on the lek, as well as a variety of complicating factors including constant high predation, alteration of surrounding habitat, local traffic on county road 887, among others. The total male and female count was 41 on 8 May compared to 44 in 2014. The high male count was higher than last year with 28 males compared to 19 males in 2014. In 2014, volunteers primarily counted birds on the traditional lek, but in 2015, they specifically counted birds in three separate locations (traditional lek, North Meadow and East Ridge). Female counts were lower (4 in 2015 compared to 14 in 2014) than previous years, probably largely due to difficulty in detecting them from long distance and the visual obstructions present. The 2015 count data does not accurately assess female grouse visitation at Waunita. Grouse were present at the lekking areas all 39 days volunteers collected data. Accurate analysis of flush behavior was difficult to record because the grouse were so spread out. Grouse were observed as late as 0830 am and first seen at 0540 am. Most observation ended by 0700 to 0730 when grouse moved into cover, behind geographical features (over the east ridge) or otherwise became unobservable in a consistent manner. Grouse counts were likely much lower than the actual number of birds present, due to dense vegetation in the North Meadow and the movement of grouse from the top of the East Ridge to the east side of the ridge that was out of view by the observers. Average flush time occurred 11.9 minutes after sunrise. These flush times only represent one group of observable grouse at one time and do not represent an entire lek area flush. They represent an interesting change to the trend over recent years of earlier departure from the lek when the birds were at the historic lek site. Moving away from the parking area and other potential disturbances (predators, vehicles on county road, agricultural practices in the meadow) may have contributed to the longer lek residence time.

Traditional Lek

This lek was not used in a reliable or consistent manner with only several birds passing through the entire season.

East Ridge

The East Ridge was used predictably throughout the season. Grouse were observed 39 out of 39 days data were collected. The birds were widely spread out occurring from east of the cottonwood trees on the traditional lek further north where the ridge meets an eroded slope on an adjacent hillside leading up to Tomchi Dome. Typically birds were located on the ridge directly behind the h-post (center of traditional lek) to sagebrush clearings on the northern end of the East Ridge. The East Ridge provided excellent views when grouse became silhouetted on the ridge. All identifying features of males could be seen.

North Meadow

The North Meadow was used consistently as well but varied in grouse locations and viewing opportunities. Grouse were present 33 days out of 39 observed days. Most of the time views of the birds were at least partially obstructed by vegetation. The counts varied due to time of observance as grouse constantly moved in and out of view. Grouse in the North Meadow provided less clear viewings for the visitors from their difficult position. On several occasions a larger group of grouse then were visible would flush from the area illustrating the likelihood of under counting these birds in the North Meadow lek. Some visitors realized they could get closer views of the grouse in the North Meadow by driving up County Road 887 and parking along the side of the road. Sisk-a-dee sent out numerous e-mails, had many phone conversations, and posted on the CoBirds and eBirds sites to encourage birders to continue to view grouse from the parking area. The number of users that violated the protocols by driving up the road is unknown, as volunteers did not have a complete view of the road from the parking area, but effort to reduce this behavior seemed to be relatively effective.

Photo illustrates the meadow and traditional lek (foreground) and East Ridge (arrows). Photo by Skyler Stanley.

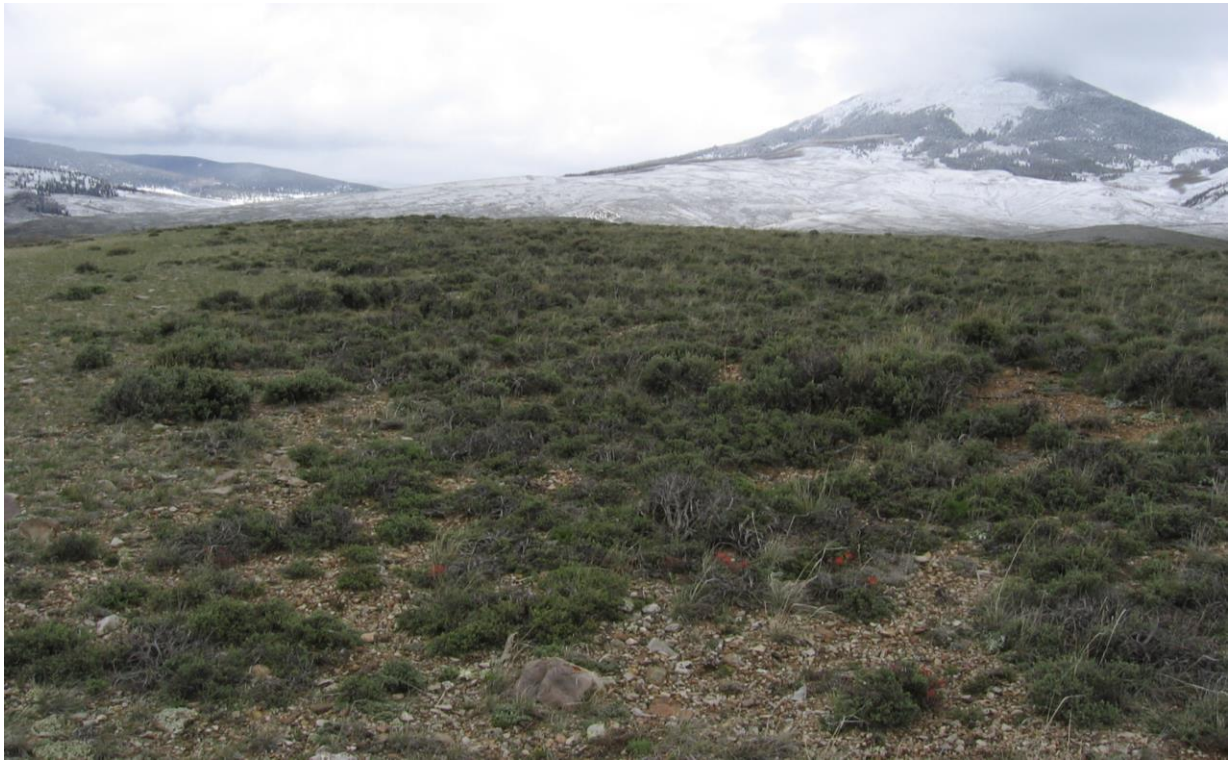


Photo illustrates habitat on the East Ridge. Photo by Dan Schneider.

Visitor Use

Of the 299 true visitors, 182 used the viewing trailer (60.9% as compared to 44% last year). However, 139 (39%) visitors used the parking lot whereas only 45 (19%) used the facilities last year. In 2014, we had visitors from 22 states and 4 countries outside the U.S. Before and during the season a few groups canceled reservations. Two different birding groups used the trailer on 22 April and two were scheduled for 17 April but we cancelled due to weather. One of the groups rescheduled the following day and one group returned home without visiting the lek.

The main issue for this season was helping parking lot visitors understand where the birds were located and providing adequate tools (optics) to view the birds. All viewing trailer occupants had successful observations of the grouse with the aid of volunteers, yet a handful of parking lot visitors did not see the birds as they left before a volunteer could help them or simply did not have access to proper optics. This lead to a change in previous year's protocols with volunteers inviting visitors to quietly set up scopes outside their cars to view birds. This worked well and most visitors left having seen grouse as well as being informed of many other species of wildlife present at the lek. Although, this year did not result in intimate grouse observations, it provided adequate views of the birds and for much longer period of time and without the threat of disturbing the grouse. Grouse use of the traditional lek is desirable for close viewing but may actually be an undesirable if public viewing contributes to impacts on the bird's breeding behavior and reproductive success. In this manner the distance allowed for less human disturbance and gave visitors more room for error than when birds were very close. It was likely that human activities at the parking lot and viewing trailer did not directly disturb Gunnison sage-grouse in 2015. Out of the 43 (43% of all potential disturbances) potential human disturbances and the 11 (12% of vehicles) cars that were not following protocol no grouse disturbances from the viewing area were recorded. Considering that human disturbance to the grouse is significant, the increased distance from the viewing area to the new lekking locations may actually benefit the watchable wildlife program by lowering human disturbances from the unavoidable human error in following protocols. While these developments may benefit the grouse at Waunita ecologically, there may be an increase in human pressure to get closer views. A main challenge that has developed now that the grouse have moved from their historic lek location is discouraging people from driving up the road and parking to observe the birds in the North Meadow. Out of the 18 grouse disturbances only 2 (11% of disturbances) were human induced, arising from cars parking along CR 887. Though CR 887 is a public road, visitor parking adjacent to private land puts pressure on the private landowner's privacy, animal herds and land health, and makes the viewing area appear arbitrary, if birders can drive up the road for a closer view. Because we have already observed the impacts of human presence we should be concerned that moving closer to the birds may push them even further away. Although signs were removed last year, some form of onsite education needs to be in place for people unaware of the viewing sight protocols and educating visitors of the threshold disturbance that causes uncharacteristic grouse behavior. Such information could be present in pamphlet form and/or signs on the west side of the trailer where readers will be hidden from view. Sisk-a-dee encourages wildlife viewing philosophies that focus on respecting Gunnison sage-grouse needs over potentially more invasive, closer viewing experiences. Because we know human presence causes changes in grouse behavior, as seen from the abandonment of the traditional lek, Sisk-a-dee and CPW may consider limiting viewing days to every other day or only several times during the week to further decrease pressure. Aside from lowering human disturbance when grouse are present, the maintenance of healthy riparian sagebrush interface will also support grouse habitat that can support grouse amidst human presence.

In order to communicate effectively, a blog was maintained throughout the 2015 Gunnison sage-grouse viewing season at http://gunnisagegrouse.blogspot.com/ and the blog was linked to the siskadee.org web page. This blog included high count numbers, wildlife sightings, significant weather, grouse behavior and locations of observed grouse. Multiple visitors commented on the blog noting they were following along and used the blog to help them decide to visit the lek.

We conducted visitor surveys and the replies indicated that for the 19 surveys completed, $5,204 was spent on transportation, food, and lodging by visitors during the 2015 Gunnison sage-grouse viewing season. If the subsample of 19 visitors is extrapolated to the 299 total visitors the estimated expenditure in the local Gunnison economy is $81,894 during 2015. The economic value of the Waunita Watchable Wildlife Program to the Gunnison economy benefits at a slow time of the year due to the interest in Gunnison sage-grouse from visitors from many locations around the world.

Wildlife Observations

Birds

Song sparrow, horned lark, western meadowlark, mountain bluebird, sage thrasher, Wilson's snipe, killdeer, Brewer's blackbird, common grackle, black-billed magpie, red-wing blackbird, American robin, white-crowned sparrow, Brewer's sparrow, dark-eyed junco, mallard, Eurasian collard dove, yellow-headed black bird, northern flicker, great horned howl, red-tail hawk, northern harrier, Swainson's hawk, common raven, American crow, yellow-rumped warbler, green-tailed towhee, rough-legged hawk, golden eagle, and western kingbird were observed from the viewing site.

Gunnison sage-grouse sign observed on the East Ridge and North Meadow. Photos by Dan Schneider.

Mammals
Coyote, mink, Gunnison's prairie dog, mountain cottontail, vole, deer mouse, chipmunk, pronghorn, elk, and mule deer were observed from the viewing site.

Plants
Multiple willow species, cottonwoods, sedges (carex), rushes, native grass, sagebrush, rabbit brush, paint brush, silver lupine, early moss phlox, nipple cactus, blue bells, bitterbrush, currant, greasewood, sedum, stinging nettle, and cow parsnip were observed from the viewing site.

Site Issues: Parking Lot and Trailer
Viewing from the raised trailer position provided the best viewing experiences. To increase views in the parking lot volunteers allowed visitors to quietly set up spotting scopes outside of cars to obtain an observable perspective only after it was clear that no grouse were using the traditional lek site. Because visitors were allowed to leave their vehicles to set up spotting scopes, the parking location was less important for success in grouse viewing in 2015. Many parking lot visitors had trouble-locating grouse without prior knowledge of the lekking areas, therefore the volunteers played a key role in assisting visitors in locating the grouse at the site. Adequate parking spaces for cars and tour groups are available but the best overall view of the grouse is from the middle section on the viewing pull out. The first and last cars view to the North Meadow was obscured but the East Ridge was observable from all cars by the wall. Visitors suggested that a sign placed in the parking lot explaining parking protocols would be helpful. The parking lot volunteers should be able to direct the first few cars when people arrive so succeeding cars can follow along. There was an average of 3.4 cars present on site daily during the 39 day data collection.

In the trailer, guests complained of the wooden trailer benches without cushions or blankets. Group leaders should be encouraged to recommend visitors to bring proper padding and clothing. Sisk-a-dee continues to mention this to all groups and visitors. Further, visitors are reminded prior to their visit that entering the trailer in the dark is difficult for some people. A handle to hold on to would be helpful for mobility-restricted visitors. Opening the windows creates some noise and if not done slowly can cause loud sounds. Bumps, walking, dropping equipment easily create noises that are funneled out of the windows. Noises generated within the trailer such as the fabric of the group member's coat created a constant shuffling sound. Whispering and talking is helpful while guiding a group and probably is minimal and does not travel to the lek. Inevitably coughs, sneezes, and other bodily sounds are produced by visitors. Muffling the trailer in some way may decrease noise disturbance and allow trailer occupants more leeway when loud noises occur. Movement from the trailer is also evident especially with sunlight shining in and highlighting the viewers. The key for reducing movement is strategically placing spotting scopes evenly throughout the trailer so movement between benches or up and down the trailer is minimized.

Data Forms
The CPW grouse count data form was altered to allow volunteers to count grouse specifically in three distinct locations: the historic lek, the North Meadow, and the East Ridge. Beyond the three-lek locations represented on the grouse data sheet, gps points with names can be added to the attached map to isolate grouse movement more accurately. Due to distance and that the grouse were spread out and obstructed by vegetation or terrain, the determination of grouse disturbances and interactions were challenging to record on the data forms. In addition to specific time group disturbance tables and a comment section, the data sheet should include tables for general grouse behavior that sum up lek events. It was helpful for volunteers to record significant wildlife sightings throughout the morning that gave perspective on the uncertainty of how specific behaviors and disturbances were related to the surrounding habitat.

The parking lot data sheet served its purpose for 2015. Numbers could be added to the vehicle list for easy counting. The “after grouse left?” column was confusing this year because viewers left before all grouse left the area or could not be seen because of the distance. The most useful data sheets for 2015 had all tables and comment sections filled in or marked. Data sheets with only count numbers, gave no insight into the mornings events or state of the lek. Encouraging legibility and reviewing data daily are key roles of the coordinator that increase data quality. The coordinator should check data entries every day and immediately compile them into a database. Any questions with entries can then be communicated presently.

Dan Schneider, 2015 Waunita Watchable Wildlife Program coordinator scans the three lek areas and counts Gunnison sage-grouse from the CPW watchable wildlife trailer at Waunita lek. Photo by Skyler Stanley

Volunteers

The volunteer position should emphasize their role in broadening the visitor experience by aiding in sighting the grouse and providing more awareness of grouse lek ecology. If the birds remain at an observable distance that allows for more human movement described in the protocol the volunteers can fill a more interactive educational role. The training sessions should include a mock count with a follow along data entry technique that includes what data to be aware of, any technicalities retrieving that data, and legibility. Volunteers are busy students and experience varies, thus data collection is not precise amongst volunteers. Perhaps certain volunteers should be assigned specific roles in collecting either grouse counts or in observing humans and interacting with the visitors.

Using a text message reminder the night before a volunteer went to the lek worked really well. This protocol made it easy to communicate with the volunteers regarding groups, equipment and so on. Also, carpooling-helped volunteers count on each other to meet up before meeting a group or driving to the lek and reduced the volunteer impact at the site. Being able to communicate by phone throughout the day about data sheets, problems at the lek, or questions was helpful.

Visitor communications

Sisk-a-dee continued to communicate with the public regarding the Waunita Watchable Wildlife Site. Many visitors who contact Sisk-a-dee are interested in viewing grouse outside of the April 1- May 10 viewing season. Many other calls and e-mails are related to specific questions about the viewing experience. 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 office phone (970-943-7121) or e-mail address (pmagee@western.edu). Interested parties were also able to contact Daniel Schneider through e-mail and phone. Further, Dan Schneider maintain a blog throughout the 2015 season to update visitors on lek happenings.

Visitor Comments

Visitor comments focused on the distance of the birds making suggestion for closer or more optimal viewing. Many visitors stated they would pay a fee for closer views and walk-in use of the trailer blind. The last two weeks of the season, volunteers allowed parking lot visitors to enter the trailer for free. This allowed for a better viewing experience. One-person criticized volunteers for parking in the best viewing spot, asking if they could be saved for visitors. Overall, the groups and parking lot visitors were very appreciative of the experience even though they were aware of the difficult view.

Reservations and Fees

Reservation fees will remained at $100 for the 2015 viewing season and no change is proposed for 2016. The cancellation fee of $50 after March 15 will also remain. The reservation policy is that groups can only reserve the trailer on 1 January for the following year to limit scheduling miscommunications during the summer months. For example, a group may reserve the trailer on 1 January 2015 for the 2016 viewing season. 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. Sisk-a-dee will meet with CPW and the Gunnison Basin Strategic Committee to discuss viewing for 2016, so reservations that have already been taken are tentative and all groups were reminded of this when they made their reservation.

Sisk-a-dee Website

The Sisk-a-dee web site is the main source of contact fro visitors who intend to view Gunnison Sage-grouse. The website is updated annually and changes are made within the year as needed. The site is serving its purpose effectively.

Volunteer Appreciation

CPW and Sisk-a-dee hosted a volunteer appreciation dinner again this season. The volunteers were invited to a pizza dinner at Mario's Restaurant in Gunnison on 3 May 2015. The volunteers also received a Sisk-a-dee t-shirt. Not all volunteers attended were able to join.

Volunteer Responsibilities

Monitoring Visitor Use at Waunita:

1. Pick up a spotting scope the day before you count (make sure you do this before the office closes around 4 pm).
2. Make sure you have all data sheets before you go to the site.
3. Drive by Gunnison Bank and Trust to read the air temperature on thermometer.
4. Make sure that you are at the site at least one hour before sunrise (the sunrise times change every day so be sure to check ahead of time). The site is 19 miles east of town, and it's a good idea to allow for 40 minutes of driving (drive slowly and carefully because there are often animals on the road and sometimes the roads are icy or snowy).
5. Once at the site, set up your spotting scope with a window mount or tripod.
6. Talk to any visitors at the site: explain to them the protocol of the site; ask them where they are from; make sure they are quiet and remain in their vehicles with the engine off and the lights off; make sure no one leaves until all grouse have flushed from the lek. Hand them copies of the protocol. *Tell them that you will let them know when they can leave.*
7. Make sure you **fill out everything** on the grouse and the human data sheets (including date, observer name, weather, disturbances, numbers, etc.).
8. If someone arrives late at the site, you should leave your vehicle to explain to him or her that they must be at the site at least one hour before sunrise if they plan on returning to the site another day. Please immediately give them a protocol sheet; they may not know any of the protocol. BE PROACTIVE!
9. If anyone exits their vehicle, slams a car door, doesn't turn off their car or lights, uses the restroom, or violates the protocol in any other way, explain to them that they must be quiet until all the sage-grouse flush. Once they cause a disturbance, you may leave your car to enforce the protocol. Do not hesitate to exit your car if you need to explain protocol.
10. Watch the grouse once it is light enough to identify them. Start looking for the grouse when it seems too dark to see them. With binoculars you can see the grouse fairly well in dim light. Count the number of males and females every 5-10 minutes and record their numbers on the data sheet. Look for predators or anything that might disturb them.
11. Once you have obtained your first accurate count, walk through the parking lot routinely (every half hour or so) to point out location of the grouse, encourage adherence to the protocol, and to answer any questions.
12. Once all the grouse have flushed or left the lek, record the time they flushed and the direction they flushed. Continue to scan for any sage-grouse remaining on the lek for an additional 5-10 minutes, and check with anyone in the trailer to be sure all birds have flushed before allowing people to leave the site, as people in the trailer may have a different angle/vantage point. If the birds flushed and flew to the sagebrush covered ridge behind the lek (to the east of the lek) but are no longer on the lek, you may leave.
13. Give visitors the economic impact surveys (1 per car), and encourage them to take a few minutes to fill them out at the site (as opposed to filling them out later and sending them to Sisk-a-dee—people usually forget about the surveys once they leave).
14. **Drop off the scope and data sheets immediately** the morning you return from the site (weekend volunteers must turn in data sheets on Monday morning).

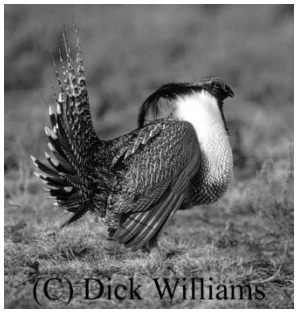
When meeting a commercial group:

1. Pick up a scope, keys to the viewing trailer, and data sheets the day before going to the lek. Bring a flashlight or headlamp.
2. Drive by the Gunnison Bank and Trust to read the air temperature on thermometer.
3. Meet the group at their hotel at the specified time (usually 45 minutes to an hour before arrival time – one hour and fifteen minutes before sunrise, to allow plenty of time for the group to set up).
4. At the hotel, explain the protocol to the group. They should have read it already, but just reiterate it to them since it's so early in the morning. Also tell them that there is an outhouse at the site but it is only available for use after all birds have departed the lek. Be sure they know not to slam car/van doors or talk loudly at the site. Make sure the group members are prepared to go directly from the van to the trailer – they shouldn't be organizing their belongings once the y arrive at the site.
5. At the hotel, tell the group to wait in their van(s)/car(s) once they arrive at the site while you go open the trailer.
6. Have the group drive their own vehicles and follow you to the site. Drive slowly (no more than 55 mph and carefully). Park behind the trailer (to the west of the trailer).
7. Once at the site, open the trailer. Unlock and open the door and unlock the windows (but leave the windows closed).
8. Go back and get the group. It is usually a good idea to bring a headlamp or a flashlight to shine on the steps of the trailer and on the benches. This makes it easier for the group to set up.
9. Tell the group to keep all objects on the floor, not on the benches, so that nothing falls on the floor. Also tell them to be quiet when moving around the trailer to look through scopes.
10. Once everyone is set up, turn off all lights in the trailer and push the windows open.
11. When the windows are open, make sure everyone remains quiet and still until the birds have flushed (especially once the sun is shining in the trailer).
12. When the birds have flushed, check for another 5-10 minutes for any remaining birds. If none are present, check with the volunteer in the parking lot to be sure all sage-grouse have flushed. Then tell the group they are free to go and might be interested in reading the interpretive signs. Then **lock up** the trailer.
13. Before the group leaves, make sure you collect the user fee from the group leader.

2015 Group Contacts

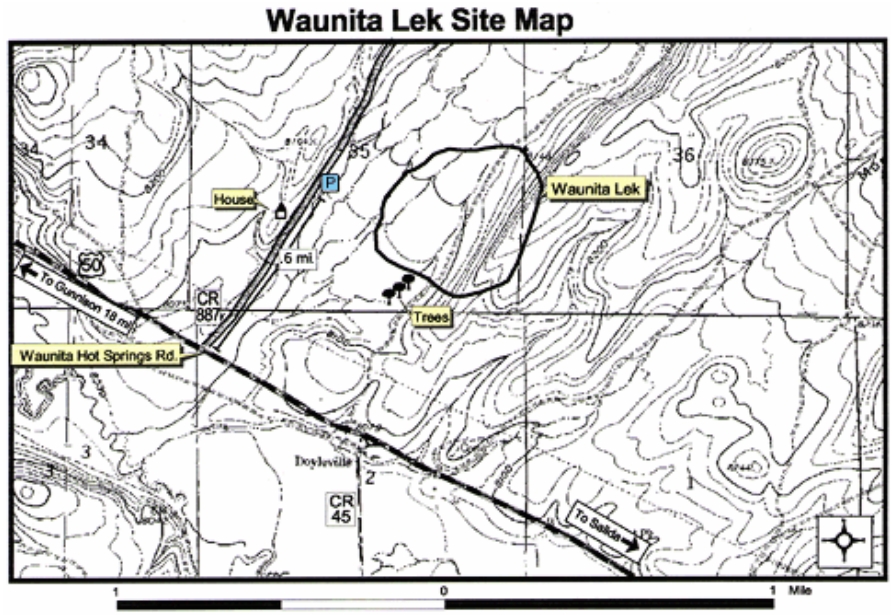
Company Name	Contact Name	E-Mail	Phone
Commercial Groups			
Wild Wings	Dick Filby	dickfilby@hotmail.com	970-948-0778
Ventures Birding Tours	Simon Thompson	simonrbt@gmail.com	828-237-0907
Otus asio Tours	Jan Hansen	otusasiotours@gmail.com	919-259-9423
Birding Abroad	Nick Whitehouse	nickwhitehouse@btinternet.com	44-07894050069
Field Guides Inc.	Maggie Burnett Carpenter	mcarpenter@fieldguides.com	406-848-7942 225-229-7368 609-408-3680
High Lonesome Bird Tours	Forrest Davis Wezil Walraven	forrest@hilonesometours.com	443-838-6589
Partnership for International Birding	Kirk Huffstater	Kirkh_cg@msn.com	303-345-5020
Quetzal Foundation/Quetzal Tours	Nick Komar	quetzal65@comcast.net	970-449-3645
Victor Emmanuel Nature Tours (VENT)	Brian Gibbons	Brian_gibbons@juno.com	214-808-5599 609-972-5471
WINGS Birding	Greg Greene	greg@wingsbirds.com	520-320-9868
Birdquest	Mike Watson	birders@birdquest-tours.com	44-7891-477560
Non-profit Educational, Environmental or Birding Groups			
Audubon Connecticut	Phil Rusch James Restivo	philiprusch@charter.net agriswold@ctaudubon.org	860-617-9005 860-377-6041
Sisk-a-dee	Patrick Magee!	pmagee@western.edu	970-641-3959
Private non-commercial groups			
Private	Robert Mertz	ramertz@gmail.com	301-229-0973
Private	Mike Henwood	mhawkhen@gmail.com	720-840-5070

2015
Waunita Watchable Wildlife Site: Gunnison Sage-grouse Lek Viewing Information and Protocol



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 May 15th.**

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 from 1 April to early-May. 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

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.**

2015 Gunnison Sunrise Times

Day	April	May
1	0653	0611
2	0651	0610
3	0650	0608
4	0648	0607
5	0647	0606
6	0645	0605
7	0644	0604
8	0642	0603
9	0641	0602
10	0639	0601
11	0638	
12	0636	
13	0635	
14	0633	
15	0632	
16	0631	
17	0629	
18	0628	
19	0626	
20	0625	
21	0624	
22	0622	
23	0621	
24	0620	
25	0618	
26	0617	
27	0616	
28	0614	
29	0613	
30	0612	

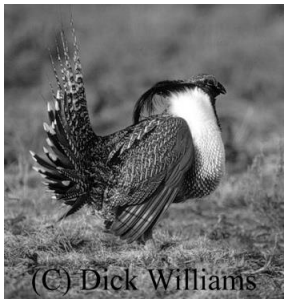
Site Management:

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 State Colorado University (WSCU) 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.

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
http://wildlife.state.co.us/LandWater/HabitatStamp/Pages/HabitatStamp.aspx

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*. The Waterwheel Inn offers discount rates for birders and grouse viewers (970-641-1650). Waunita Hot Springs Ranch, 8 miles northeast of the lek, also offers lodging (970-641-1266, http://www.waunita.com).



2015
Waunita Watchable Wildlife Site:
Gunnison Sage-grouse Lek
Commercial and Group Viewing Information and Protocol

The Gunnison Sage-grouse is a seriously imperiled species and highly vulnerable to human disturbance. Sisk-a-dee, Colorado Parks and Wildlife and Western State Colorado University actively manage the Waunita Watchable Wildlife site to minimize the impacts of viewing on the birds. Please help us make this viewing experience quality or 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!

2015 Gunnison Sunrise Times

Day	April	May
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6	0645	0605
7	0644	0604
8	0642	0603
9	0641	0602
10	0639	0601
11	0638	
12	0636	
13	0635	
14	0633	
15	0632	
16	0631	
17	0629	
18	0628	
19	0626	
20	0625	
21	0624	
22	0622	
23	0621	
24	0620	
25	0618	
26	0617	
27	0616	
28	0614	
29	0613	
30	0612	

Viewing Trailer

- The trailer is to be used by groups with reservations only. In order to reduce scheduling conflicts, you may only reserve the trailer beginning January 1 for the following calendar year. To make a group reservation contact Sisk-a-dee at 970-641-3959. A $100 fee is required.
- All groups will be escorted to the viewing trailer at the Waunita Watchable Wildlife site at least 1 hour before sunrise. See the table for sunrise times.
- Remain as quiet as possible: NO radios, cell phones, horn honking, van door slamming or other automobile noises.
- Do not drop anything inside of the trailer. This will disturb the birds and they might flush.
- Remain very quiet; if you do talk keep your voices to a whisper.
- An outhouse is available at the site for use **after** the grouse depart their lek.
- Once inside the trailer do not leave until the birds have ended their displays and have departed from the lek. Your volunteer guide will scan the lek for an additional five to ten minutes before allowing your group to leave to be sure all sage-grouse have left the lek.
- Bring binoculars, spotting scopes, warm clothes and blankets to sit on.
- When the sun illuminates the trailer please remain very still. The grouse potentially see movement in the trailer and become nervous.
- Protocols are enforced by Colorado Parks and Wildlife. Any person deviating from these protocols is suspect to a wildlife violation and fine.
- Commercial use of the Waunita Watchable Wildlife site requires a permit from Colorado Parks and Wildlife. All commercial users with reservations are covered under Sisk-a-dee's permit.
- Contact Colorado Division of Parks and Wildlife at 970-641-7885 or Sisk-a-dee at 970-641-3959 for more information.

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
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Gunnison Sage-grouse
Waunita Watchable Wildlife Program Highlights

Land Conservation -- Public/Private Partnership
Conservation easement of property containing the lek held by TNC
CPW owns parking and viewing area

Site Management – CPW
CPW is responsible for site logistics
CPW built the site – includes a parking drive way, a rock wall, viewing trailer site, educational signage
Owns and maintains viewing trailer and moves it on and off the site
Regulates site rules such as opening and closing dates (1 April to 15 May)
Issues a Special Use permit to Sisk-a-dee to coordinate the Watchable Wildlife Program

Educational Program and Public Viewing – Sisk-a-dee, CPW
Sisk-a-dee provides a free program open to public, consists of an evening slide show and morning viewing; program highlights grouse ecology and conservation
Maintains web site with lek viewing information (siskadee.org)
Developed viewing protocols for general public and commercial users in consultation with CPW
Central contact for inquiries about lek viewing and photography (5-10 calls per week)
CPW provides viewing trailer and one spotting scope and tripod; Sisk-a-dee provides second scope and tripod

Commercial Lek Viewing – Sisk-a-dee, Western, CPW
Sisk-a-dee communicates with commercial groups and maintains/updates viewing protocols
Sisk-a-dee holds special use permit with CPW
Sisk-a-dee collects user fees
CPW provides viewing trailer
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 ($500)
CPW helps attract volunteers for the site through their volunteer program
Western coordinates volunteer effort
- A Western student coordinates the volunteer effort as an intern with CPW
- Student supervises and trains a team of volunteers (approximately 10)
- Volunteers monitor the viewing area every morning from 1 April to 10 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
- Public viewing volunteer also collects data on the number of human visitors and their behaviors
- Western intern organizes site visits for all commercial groups

Western and Sisk-a-dee manage the data and write a final report for CPW each season

Gunnison Sage-grouse Viewing
Scheduling Calendar
2015

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
		March 31 **Training Session I** 6-8 pm Hurst Hall All Volunteers √	April 1 **0653** **Training Session II** At Site All Volunteers **leave@ 0445** √	April 2 **0651** Parking Lot: Trailer: **Dan, Marcel, Ron John** √ **leave@ 0445**	April 3 **0650** Parking Lot: **Ron John** Trailer: √ Sisk-a-dee evening program **leave@ 0445**	April 4 **0648** Sisk-a-dee Parking Lot**:** Trailer: **Pat!** √ **leave@0445**
April 5 **0647** Mike Watson **Birdquest** Two Jays, Kemple End, Stonyhurst, Clitheroe, Lancashire BB7 9QY, UK 44-1254-826317 (Base) 44-7891-477560 (Cell) birders@birdquest-tours.com Group: 9 Western Motel Parking Lot: **Dan** Trailer: **Erin** √ **leave@0445**	April 6 **0645** Maggie Burnett Carpenter Chris Benesh/Tom Johnson **Field Guides - Birding Tours Worldwide** 9433 Bee Cave Rd., #1-150 Austin, TX 78733 520-247-3354 (Chris) 717-991-5727 (Tom) 800-728-4953 mcarpenter@fieldguides.com Group: 16 Holiday Inn Express Parking Lot: **Gaige** Trailer: **Dustin** √ **leave@0445**	April 7 **0644** Ornithology Parking Lot: **Marcel** Trailer: **Pat!** **leave@0445** √	April 8 **0642** Greg Greene **WINGS Birding Tours** 1643 N. Alvernon Way Ste. 109 Tucson, AZ 85712 (520) 320-9868 Greg@wingsbirds.com Group Size: 16 Holiday Inn Express Parking Lot: **Ron Jon** Trailer: **Dan** **leave@ 0440** √	April 9 **0641** Sisk-a-dee evening program Parking Lot: **Mady & Jessica** Trailer: **leave@0430** √	April 10 **0639** Sisk-a-dee Parking Lot: **Sarah** Trailer: **Pat!** √ **leave@0430**	April 11 **0638** Michael O'Brien/ Brian Gibbons **V.E.N.T.** 2525 Wallingwoood suite 1003 Austin, TX 78746 214-808-5599 (Base) 609-972-5471 (Cell) tsweet@comcast.net brian_gibbons@juno.com Group: 16 Holiday Inn Express Parking Lot: **Dan** Trailer: **Joe B.** √ **leave@0430**

April 12 **0636** Simon Thompson **Ventures Birding Tours** PO box 1095, Skyland, NC 28776 828-237-0907 cell 828-253-4247 office simonrbt@gmail.com Group: 7 Holiday Inn Express Parking Lot: **Joey** Trailer: **Dan** √ **leave@0430**	April 13 **0635** Wezil Walraven /Forrest Davis **High Lonesome Bird Tours** 570 S. Little Bear Trail, Sierra Vista, AZ 85635 443 838 6589 (Forrest) 520-366-6722 (Wezil) forrest@highlonesometours.com Group: 16 Comfort Inn Parking Lot: **Dustin** Trailer: **Marcel** **leave@0430** √	April 14 **0633** Kip Miller/ Forrest Davis **High Lonesome Bird Tours** 570 S. Little Bear Trail, Sierra Vista, AZ 85635 443 838 6589 (Forrest) 269-876-7754 (Kip) forrest@highlonesometours.com Group: 16 Comfort Inn Parking Lot: **Gaige** Trailer: **Dan** **leave@0430** √	April 15 **0632** Phillip Rusch/James Restivo **CT Audubon Society Eco Travel** 30 Plains Rd PO Box 903 Essex, CT 06426 860-617-9005 (Phil) 860-377-6041 (James) philiprusch@charter.net agrisworld@ctaudubon.org Group: 6 Holiday Inn Express Parking Lot: **Jocelyn & Dan** Trailer: **Ron Jon** **leave@0430** √	April 16 **0631** Dick Filby **Wild Wings** Davis House, Lodge Causeway, Bristol BS16 3JB UK 970-704-9178 (Base) 970-948-0778 (Cell) dickfilby@hotmail.com Group size: 7 Waterwheel Inn Parking Lot: **John Kelley** Trailer: **Marcel** **leave@0430** √	April 17 **0629** Jan Hansen **Otus asio Tours** Chapel Hill, NC 919-259-9423 otusasiotours@gmail.com Group: 8 Holiday Inn Express Parking Lot: **Sarah & Joe B.** Trailer: **Dan** √ Cancelled due to weather **leave@0430**	April 18 **0628** Maggie Burnett Carpenter Eric Hynes/Jesse Fagan **Field Guides - Birding Tours Worldwide** 9433 Bee Cave Rd., #1-150 Austin, TX 78733 207-807-8791 (Eric) 011-51-9-336-2899 (Jesse) 800-728-4953 mcarpenter@fieldguides.com Group: 16 Holiday Inn Express Rescheduled from pervious day Parking Lot: **Erin** Trailer: **Dan** **leave@0430** √
April 19 **0626** Parking Lot: **Dan** Trailer: **leave@0430** √	April 20 **0625** Parking Lot: **Gaige & Dustin** Trailer: **leave@0420** √	April 21 **0624** Nick Whitehouse **Birding Abroad** 18, Cucklington Gardens, Bournemouth, England, UK BH93QS (0044) 07894050069 nickwhitehouse@btinternet.com Group size=10 Rodeway Inn Parking Lot: **John Kelley** Trailer: **Dan** **leave@0420** √	April 22 **0622** Mike Henwood 2668 Dahlia Court, Grand Junction, CO 81506 720-840-5070 (cell) 970-314-9911(home) mhawkhen@gmail.com Group Size = 2 Alpine Inn & Suites √ Quetzal Tours Nick Komar 970-449-3645 Group: 8 Hotel: Water Wheel Quetzal65@comcast.net Parking Lot: **Jocelyn** Trailer: **Ron Jon** **leave@0420**	April 23 **0621** Kirk Huffstater **Partnership for International Birding** 709 Clarkson St, Denver, CO, 80218 (PIB) 1281 Spout Springs Rd, Morristown, TN, 37814 (Leader Address) 720-320-1974 (PIB) 303-345-5020 (Kirk's cell) kirkh_cg@msn.com http://www.pibird.com Group Size: 7 to 8 Quality Inn Parking Lot: **Jessica** Trailer: **Marcel** **leave@0420** √	April 24 **0620** Robert Mertz 5100 Baltimore Avenue Bethesda, MD 20816 301-229-0973 301-512-5840 ramertz@gmail.com Group size = 1 Waterwheel Inn Parking Lot: **Sarah** Trailer: **Joe B.** √ **leave@0415**	April 25 **0618** Parking Lot: **Erin** Trailer: **leave@0415** √

April 26 **0617** Parking Lot: **Dan** Trailer: √ **leave@0415**	April 27 **0616** Parking Lot: **Dustin** Trailer: √ **leave@0415**	April 28 **0614** Parking Lot: **Dan** Trailer: √ **leave@0415**	April 29 **0613** Parking Lot: **Jocelyn** Trailer: √ **leave@0415**	April 30 **0612** Parking Lot: **Marcel** Trailer: √ **leave@0415**	May 1 **0611** Parking Lot: **Ron Jon** Trailer: √ **leave@0415**	May 2 **0610** Parking Lot: **Dan** Trailer: √ **leave@0415**
May 3 **0608** Parking Lot: **Dan** Trailer: √ **leave@0405**	May 4 **0607** Parking Lot: Trailer: **Dan & Tyler** √ **leave@0405**	May 5 **0606** Parking Lot: **Dan** Trailer: √ **leave@0405**	May 6 **0605** Parking Lot: **Tyler** Trailer: √ **leave@0405**	May 7 **0604** Parking Lot: **Pat!** Trailer: √ **leave@0400**	May 8 **0603** Parking Lot: **Dan** Trailer: √ **leave@0400**	May 9 **0602** Parking Lot: **Dan** Trailer: √ **leave@0400**
May 10 **0601** Parking Lot: **Dan** Trailer: √ **leave@0400**	May 11 **0600** Parking Lot: Trailer: **leave@0400**	May 12 **0559** Trailer: **leave@0400**	May 13 **0557** Parking Lot: Trailer: **leave@0400**	May 14 **0556** Parking Lot: Trailer: **leave@0400**	May 15 **0555** Parking Lot: Trailer: **leave@0400**	

Gunnison Sage-grouse Viewing
Scheduling Calendar
2016

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
					April 1 V.E.N.T. Brian Gibbons brian_gibbons@juno.com Group: Hotel:	April 2 V.E.N.T. Brian Gibbons brian_gibbons@juno.com Group: Hotel
April 3 Nigel Sadler Birdquest birders@birdquest-tours.com	April 4	April 5	April 6	April 7 Sharon Mackie Field Guides, Inc 9433 Bee Cave Road Bldg 1, Suite 150 Austin, TX 78733 800-728-4953 512-263-7295 smackie@fiedguides.com	April 8 Sue Riffe sheflew@gmail.com Sisk-a-dee evening program	April 9 Sisk-a-dee

April 10 **High Lonesome Bird Tours** Forrest Davis 443 838 6589 forrest@highlonesometours.com	April 11	April 12 **High Lonesome Bird Tours** Forrest Davis 443 838 6589 forrest@highlonesometours.com Group: 16 Hotel:	April 13	April 14 Dick Filby 970-704-9178	April 15 Sharon Mackie Field Guides, Inc 9433 Bee Cave Road Bldg 1, Suite 150 Austin, TX 78733 800-728-4953 512-263-7295 smackie@fiedguides.com Sisk-a-dee evening program	April 16 Sisk-a-dee
April 17 Scott Sneed <sneed05@msn.com	April 18	April 19 Rudolf koes rkoes@mts.net	April 20 Sue Riffe sheflew@gmail.com	April 21 Dick Filby 970-704-9178	April 22 Nick Komar Quetzal Tours 970-449-3645	April 23
April 24	April 25	April 26	April 27	April 28	April 29	April 30
May 1	May 2	May 3	May 4	May 5	May 6	May 7
May 8	May 9	May 10				