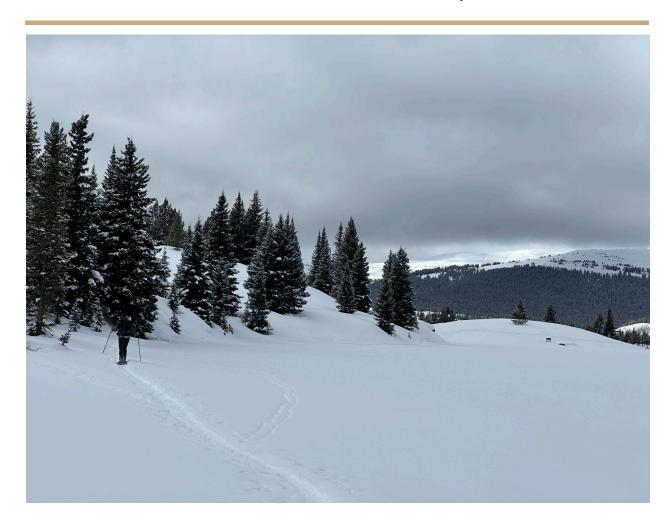


Winter 2023-2024

Colorado Winter Recreation Data Report



Background

Backcountry winter recreation is booming in Colorado and nationwide. The latest SIA Participation Study (2022-2023) reports over 27 million non-motorized, non-resort winter recreationists, with double-digit growth year over year, versus a flat or declining 12 million

resort skiers/snowboarders nationwide.¹ The International Snowmobile Manufacturers Association meanwhile reports 53,553 snowmobiles sold in the U.S. in 2023 [sic] and 1.26 million currently registered snowmobiles in the U.S.² In Colorado, 12.1% of the state's total population participates in skiing or snowboarding³ and the state is a national draw for winter recreation. Despite the importance of winter recreation for Coloradans, and for Colorado's economy, little actual data exists concerning backcountry winter recreation use on National Forests in the state. A better understanding of where and how winter recreation occurs on National Forest lands is crucial to better recreation planning, including informing Over-Snow Vehicle travel planning. To this end, Winter Wildlands Alliance is working to collect winter recreation use data and coordinate existing data collection efforts in Colorado.

2023-2024 winter data collection in Colorado

Trained volunteers and organization staff used the Colorado Mountain Club (CMC) Recreation Impact Monitoring System (RIMS) app to collect data for on-the-ground winter visitor use assessments and to report winter recreation travel management violations and recreation use conflicts in Colorado. The CMC Snow Ranger program, which operates on the Grand Mesa, Uncompandere, and Gunnison National Forest uses the RIMS app for visitor use monitoring on Red Mountain Pass and the Grand Mesa. San Juan Mountain Association (SJMA), which operates on the San Juan and Rio Grande National Forest, uses their own data collection methods for its Snow Ambassador monitoring work. In addition to these two formal winter visitor monitoring and education programs, the RIMS app was utilized by some WWA volunteers and volunteers with the Grand Mesa Nordic Council. Altogether, 362 visitor use assessments and violation & conflict reports were collected in Colorado this winter through the RIMS APP. Altogether, contact was made or observed with 7,372 people.

In general, we find that the key to building a robust dataset of winter recreation information, where data is collected consistently from the same locations throughout the season, is to have established programs and regular volunteers using RIMS.

¹ https://members.snowsports.org/research/2022-2023-participation-study/

² https://www.snowmobile.org/snowmobiling-statistics-and-facts.html

³ See 2022-2023 SIA participation study. Note that this figure does not include Nordic skiing or snowshoeing and does not differentiate between resort and backcountry activities.

This winter marked the fifth season of the CMC Snow Ranger Program, which is a joint effort between CMC and the Forest Service. The program is based out of Montrose, Colorado, and splits its effort between the Ouray Ranger District and the Grand Valley Ranger District. Snow rangers interact with and survey winter recreationists. The Forest Service provides a truck, trailer, snowmobiles, emergency communication devices, and fuel for the program while CMC provides administrative overhead, uniforms, ski touring gear, and avalanche safety equipment.

This winter also marked a continuation of the SJMA Snow Ambassador program, which is a joint effort between SJMA and the Forest Service. The program operates primarily within the San Juan National Forest and splits its effort between Andrews Lake which is part of the Columbine District, and Wolf Creek Pass, which shares boundaries with the Pagosa Ranger District on the San Juan National Forest and the Divide Ranger District on the Rio Grande National Forest. This was the first season operating at Wolf Creek Pass.

The Forest Service provides wages for snow ambassadors, while SJMA provides administrative overhead, uniforms, tabling materials, and a warming hut for the Andrews Lake location. Snow ambassadors educate on Leave No Trace, provide backcountry information, share Colorado Avalanche Information Center avalanche forecasts, and survey winter recreationists. While both Andrews Lake and Lobo are non-motorized trailheads, the Wolf Creek Pass snow ambassador also interacts with and surveys OSV users.

What Data is Collected

Visitor Totals · Recreation Use Type · Conflicts & Violations · Photos

The following data is not based on a predetermined random sample and therefore should not be used for statistical purposes. Each program established their own schedules and volunteers collected at their own pace. However, the data can still point towards areas of high use and recommendations for better management.

Collection Method

The Colorado Mountain Club's Recreation Impact Monitoring System (RIMS) mobile application provides a template for collecting data in a similar format to that seen in preliminary USFS winter data collection efforts. App users can track visitor use, conflicts and violations, and trail maintenance needs, and those observations are visible on the RIMS app. For more information on the CMC RIMS app, please visit:

https://winterwildlands.org/announcing-the-rims-app.

To create a holistic picture of winter recreation in Southwest Colorado, some data collected by SJMA is provided in the report, but it should be noted that SJMA uses a different method for data collection separate from RIMS and there is not a formal partnership between SJMA and WWA. SJMA's season-end report can be requested from the Forest Service.

National Forests Included

Data was collected throughout 5 National Forests across Colorado this year between Winter Wildlands Alliance volunteers, Colorado Mountain Club, and San Juan Mountain Association. Forests included the Grand Mesa, Uncompanyere, and Gunnison (353 assessments), Arapahoe and Roosevelt (1), Pike-San Isabel (1), Rio Grande, (43), and San Juan (58). The Rio Grande began winter travel planning in 2024, the San Juan NF is slated to begin in 2025, and the GMUG recently completed a forest plan revision and may begin winter travel planning soon. Therefore, these 3 forests will be the primary focus for WWA in the 2024-2025 season.

Summary

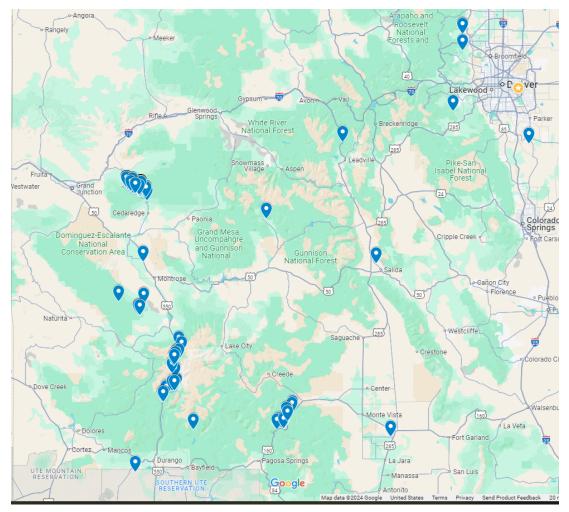


Figure 1: 2023-2024 RIMS assessments by location

- 362 total RIMS Assessments
- 5 forests: Grand Mesa, Uncompangre, and Gunnison, Arapahoe and Roosevelt, Pike-San Isabel, Rio Grande, and San Juan
- 41 locations (primarily on Red Mountain Pass, Wolf Creek Pass, Andrews Lake and Grand Mesa)

Visitor Use Assessments

The vast majority of visitor use assessments collected in the RIMS app were recorded by Colorado Mountain Club Snow Rangers. This program demonstrates the value of consistent data collection throughout a season and is summarized in their 2024 report⁴. In total, 362 Visitor Use Assessments were collected throughout 5 forests across Colorado using RIMS. In addition to the formal programs run by CMC and SJMA, 12 volunteers also used the RIMS app to collect winter recreation data this season. Volunteers collected data across 19 locations on 5 National Forests.

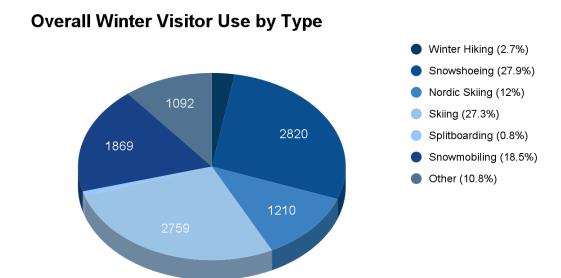


Figure 2: Overall Winter Visitor Use by Recreation Type

81.5% of winter USFS users captured by either RIMS visitor use assessments or observation were human-powered visitors, with nearly one-third engaging in family-friendly snowshoeing or hiking.

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⁴ Appendix 1: Colorado Mountain Club Snow Ranger Program – Ouray, 2023/24 Season Report.

SAN JUAN NATIONAL FOREST

San Juan Visitor Use by Type

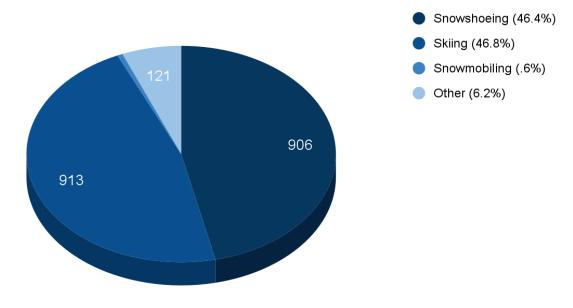


Figure 3: Overall Winter Visitor Use by Recreation Type, San Juan National Forest

SJNF is a mecca for human-powered recreation, but the data could better reflect the amount of snowmobiling that occurs. Identifying ways to work with the snowmobile community is an opportunity for the 2024-2025 season.

San Juan

Total Site Visits by Locations

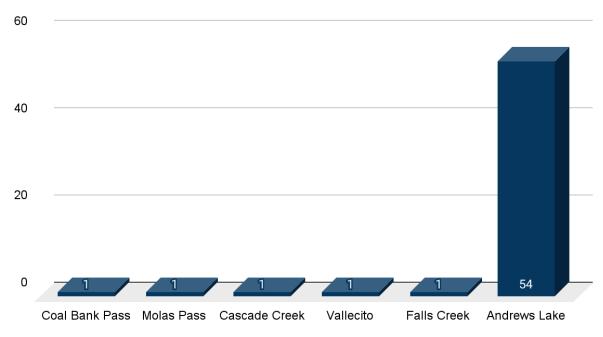


Figure 4: Total Site Visits by Locations, San Juan National Forest

Most data collected in SJNF is at Andrews Lake Winter
Recreation Area due to SJMA Snow Ambassadors. Broader data
collection efforts at other popular trailheads like Falls Creek,
West Fork, or Haviland would help identify winter recreation
patterns in advance of winter travel planning.

RIO GRANDE NATIONAL FOREST

Rio Grande Visitor Use by Type

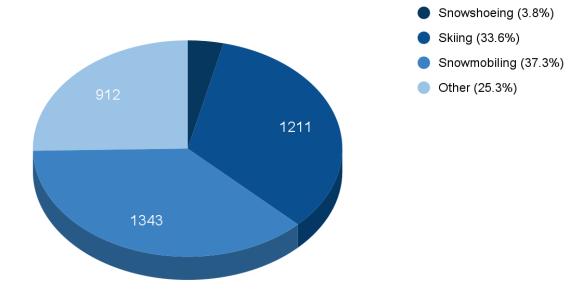


Figure 5: Overall Winter Visitor Use by Recreation Type, Rio Grande National Forest

Wolf Creek Pass has bountiful motorized & non-motorized winter recreational opportunities, highlighting the need for a balanced winter travel plan.

Total Site Visits by Locations

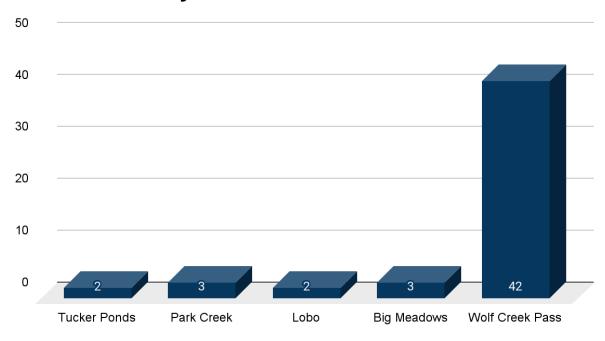


Figure 6: Total Site Visits by Locations, Rio Grande National Forest

Most data collected in RGNF is at Wolf Creek Pass by SJMA Snow Ambassadors. Broader data collection efforts in areas such as Creede or Cumbres/La Manga Pass would ensure there is forest-wide data to inform the ongoing winter travel planning process.

GRAND MESA, UNCOMPAHGRE & GUNNISON NATIONAL FORESTS

GMUG Winter Visitor Use by Type

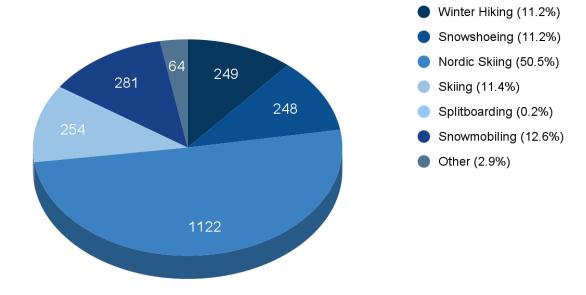


Figure 7: Overall Winter Visitor Use by Recreation Type, Grand Mesa, Uncompangre, and Gunnison National Forests

Over 50% of recreationists participated in Nordic skiing, highlighting the popularity of local Nordic groups. Capacity of CMC snow rangers and shifting priorities led to less backcountry patrols and monitoring at Red Mountain Pass, resulting in insufficient data on visitor use assessments along Highway 550. WWA volunteers collected a few assessments at parking lots along Red Mountain Pass such as Lower Commodore, Red 2, and Red Mountain Lodge, and plan to make this an area of focus for the 2024-2025 season.



GRAND MESA, UNCOMPAHGRE & GUNNISON NATIONAL FORESTS

Total Site Visits by Locations

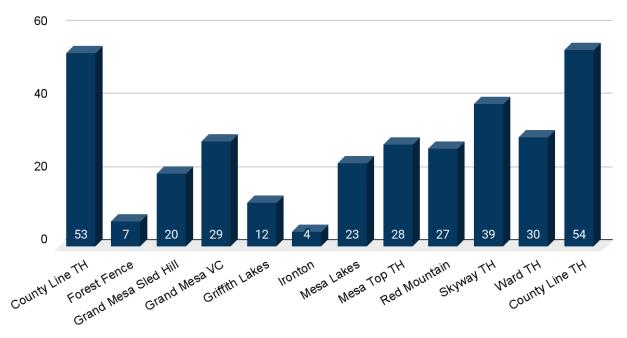


Figure 8: Total Site Visits by Locations, Grand Mesa, Uncompander and Gunnison National Forests

CMC Snow Rangers have robust coverage across the Grand Valley RD within their team & Grand Mesa Nordic Council. As winter travel planning begins for the GMUG, the snow ranger program should be looked at as a successful model for implementation. This ranger district has the most representative sample of winter recreation data collection, offering a look into how data can be collected by multiple partners.

Conflicts & Violations

The winter violations and conflict reporting function in RIMS provides a centralized tool for the public to report these incidents. RIMS does not serve as a real-time enforcement tool. Rather, it provides a way to begin to track actual use conflict and trespass with verifiable, non-subjective data.

In total, only 4 violations and conflicts were collected. This doesn't mean incidents weren't happening, but that data collectors need to consistently visit a trailhead and be comfortable with using the RIMS tool.

Three of the 4 violations and/or conflicts noted in RIMS this past season occurred on or around the County Line trail, a non-motorized area on the GMUG National Forest, with one additional violation reported on the San Juan National Forest.



Image 1. Snowmobiles riding over a groomed Nordic trail on the GMUG National Forest, where motorized travel is not allowed.



Image 2. Fat bikers using a trail permitted for hikers and equestrians only, despite proper signage on the San Juan National Forest.

Conclusion

Winter recreation monitoring and data collection helps to provide information for land management and winter travel planning. As winter travel planning ramps up in Southwest Colorado, it is critical to identify winter recreation patterns in key areas and where opportunities exist for enhanced partnerships, education, and enforcement. This report provides a holistic picture of regional winter recreation patterns while recognizing that the data is not absolute as it merges data collected from multiple entities. WWA wants to recognize what effective winter programs look like, how those programs can assist with implementation, and how volunteers and other non-profit partners can get involved to produce an even more robust RIMS dataset.

For the 2024-2025 season, WWA plans to increase data collection in key locations that had either minimal or no data and do not have coverage from the two winter programs in the region. As winter travel planning ramps up across the three national forests in Southwest Colorado, data collection becomes crucial to ensure WWA and partners provide the most accurate winter recreation data to the Forest Service.

WWA is committed to working with regional partners and is appreciative of the work Colorado Mountain Club and San Juan Mountain Association are doing to enhance on-the-ground capacity for visitor education and interaction. We encourage the Forest Service to continue to invest in these programs.

For More Information

Contact Brittany Leffel: <u>bleffel@winterwildlands.org</u>

Appendices

 Appendix 1: Colorado Mountain Club Snow Ranger Program – 2023/24 Season Report



Colorado Mountain Club - Snow Ranger Program Grand Valley/Ouray Ranger Districts 2023/24 Season Report



County Line XC ski system, Tower trail, Grand Mesa National Forest, CO

Season Overview

The winter of 2023/24 marked the fifth season of the Snow Ranger Program: a combined effort between Colorado Mountain Club (CMC) and the U.S. Forest Service (USFS). The program is co-located between the Grand Valley Ranger District, based in Grand Junction, CO and the Ouray Ranger District, in Montrose, Colorado. Snow Rangers based out of Grand Valley Ranger District cover the highway 65 corridor of Grand Mesa National Forest, an intensively utilized winter recreation area most popular with cross country skiers, snowshoers and snowmobilers. The Ouray Ranger District is a favorite for backcountry skiers and encompasses a vast winter recreation area that includes Red Mountain Pass, the Cimarron Mountains, the Sneffels Range of the San Juan Mountains, and the southern portion of the Uncompander Plateau.

Colorado Mountain Club employed three Snow Rangers during the 2023/24 season: Matt Rothrock and Kricket Olin returned for another successful season and they were joined for the first season by Kelly Hansen. The CMC team patrolled the Grand Valley and Ouray districts during the peak winter months of mid-January to April 1st, 2024, working mostly a Friday-Monday schedule. Snow Rangers contact the public and survey various winter user groups including skiers, snowshoers, split boarders, snowmobilers, fat bikers, ice fishing, avalanche safety classes, guided backcountry groups, and overnight visitors using rented and privately owned huts and yurts. The primary focus of Snow Rangers is face-to-face contact at trailheads and on trails systems with winter recreation users.

The USFS provided work trucks, trailers, snowmobiles, and fuel to the program while CMC provided administrative overhead, emergency communication devices, uniforms, ski touring gear, avalanche safety equipment, and an additional vehicle.

2023/24 Season Snapshot:

- 1 training Silverton Avalanche School, Avalanche 1 course, January 3-5, 2024
- 1 training USFS snowmobile course, January 23-25, 2024
- 1 Friends of Youth and Nature, youth group event
- 1 Rocky Mountain Dogsled Club race
- 1 three-day, two-night San Juan Mountain Hut patrol
- 2 Grand Mesa Nordic Council XC ski races
- 2 Grand Mesa Nordic Council Ward public meet-up XC ski events
- 2 public outreach, moonlight XC ski events
- 6 Nature Connection events with various youth groups

Grand Valley Ranger District

- Shoveled snow blocking 10 pit toilets, operated snowblower at visitor's center, 40~ days
- 406 miles of cross-country ski patrol
- 462 miles of snowmobile patrol
- 251 visitor use assessments on the CMC RIMS app (184 in 2022-2023)
- 636 vehicles with trailers (353 vehicles w/trailers in 2022-2023)
- 1,879 public contacts (1060 in 2022-2023)
- 2,092 vehicles surveyed (2154 vehicles in 2022-2023)

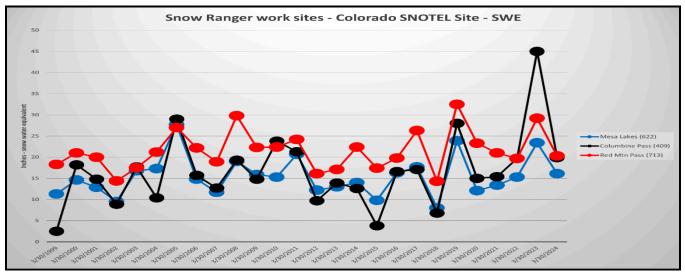
Ouray Ranger District

- 1 Arrowhead Snowmobile Club boundary patrol
- 1 timber sale permit snowmobile patrol
- 3 avalanche transceivers installed (Red Mtn, Ophir Rd, San Juan Vista)
- 3 wilderness boundary signs installed
- 7 grooming patrols on Uncompangre Nordic Association trails
- 50+ miles of cross-country ski patrol
- 1,000+ miles of snowmobile patrol

Season Details

The 2023-24 Snow Ranger program continued to have two overarching program goals: 1) to have a better understanding of the current and future needs of these areas from a land management perspective, and 2) to act as a helpful source of information and education to the public. This season saw a greater emphasis in Grand Mesa National Forest with less patrolling of Red Mountain Pass than in past winters.

The CMC Snow Ranger team continued to strengthen professional relationships with private land management and outreach organizations. This season we worked with the Nature Connection, Friends of Youth and Nature, Grand Mesa Nordic Council (GMNC), the Uncompanded Nordic Association (UNA), the Arrowhead Snowmobile Club and Rocky Mountain Dogsled Club.



Annual Snow Water Equivalent (SWE) data for CMC Snow Ranger work areas over the past 25 years. 2024 saw enjoyable snow levels in CMC areas. The overall Colorado snowpack statewide is 109 percent of median SWE as of March 30th, 2024 https://www.wcc.nrcs.usda.gov/ftpref/support/states/CO/products/#state=co&element=wteq

Grand Valley Ranger District

CMC's third winter in Grand Mesa National Forest saw snowfall that provided excellent opportunities for cross country skiing, snowmobiling and many other activities. Grand Mesa has three groomed Nordic trail systems maintained by the Grand Mesa Nordic Council, covering approximately 55k (approx. 34 miles) of trail. Snow Rangers Matt Rothrock and Kelly Hansen covered these trail systems in their entirety. The rangers focused on contacting the public, making trail recommendations, identifying safety issues and deconflicting conflict between different user groups. Cross-country skiing opportunities still abound as of March 30, 2024; GMNC extended their season to April 30, 2024 and grooming is still going strong.





An Uncompanded Nordic Association board member serves as crossing guard during a Friends of Youth and Nature event at the Ward TH (left). Members of the public enjoy a GMNC XC ski event on the Ward trail system (right).

Grand Mesa National Forest is also a world-renowned snowmobile destination with over 800 square miles of public riding available. Matt and Kelly repeatedly spoke with snowmobilers and timber sled riders who drove from outside the region and state to recreate on Grand Mesa due to our snowfall this season. Snow Ranger Kricket Olin and USFS Ranger Eric Sumner joined Matt and Kelly on Grand Mesa for several snowmobile patrols, across multiple days, covering 200+ miles. Over 100 Off-Highway Vehicle (OHV) snowmobile permits were checked during these patrols, and more than a dozen verbal warnings were issued. Also, snowmobile corridors were mapped in three general areas where incursions had been reported and 17 specific locations for future "no snowmobiling" signs were identified. The recorded coordinates for the signs were reported to USFS leadership and their installation prior to next season will contribute to XC skier and snowmobiler safety in a joint-use area.





Timber sleds (left) are growing in popularity due to excellent handling capabilities in tight trees and steep terrain. A USFS snowmobile training group (right) stops to talk about safety while riding Grand Mesa trail systems.

Snow Rangers also serve as the face of CMC and the USFS. Our team interacts weekly with various organizations on public land, maintaining relationships with these groups that are important to future land management success. Snow Rangers volunteered at one youth event led by the Friends of Youth and Nature and six events led by the Nature Connection, both of whom are non-profit organizations focused on getting kids outside. Additionally, our team was critical to the success of a two-day Rocky Mountain Dogsled club race when race organizers had difficulty mapping the trail during event set-up. Snow Rangers took charge and correctly interpreted the mapped data points, allowing the racecourse to be successfully laid out and tracked in. A Rocky Mountain Dogsled club representative sent a thank you email to USFS leadership specifically mentioning and praising Kricket, Matt and Eric for their professionalism, helpfulness, and commitment to the dogsled event.





Grand Mesa Nordic council - XC ski race at Skyway TH

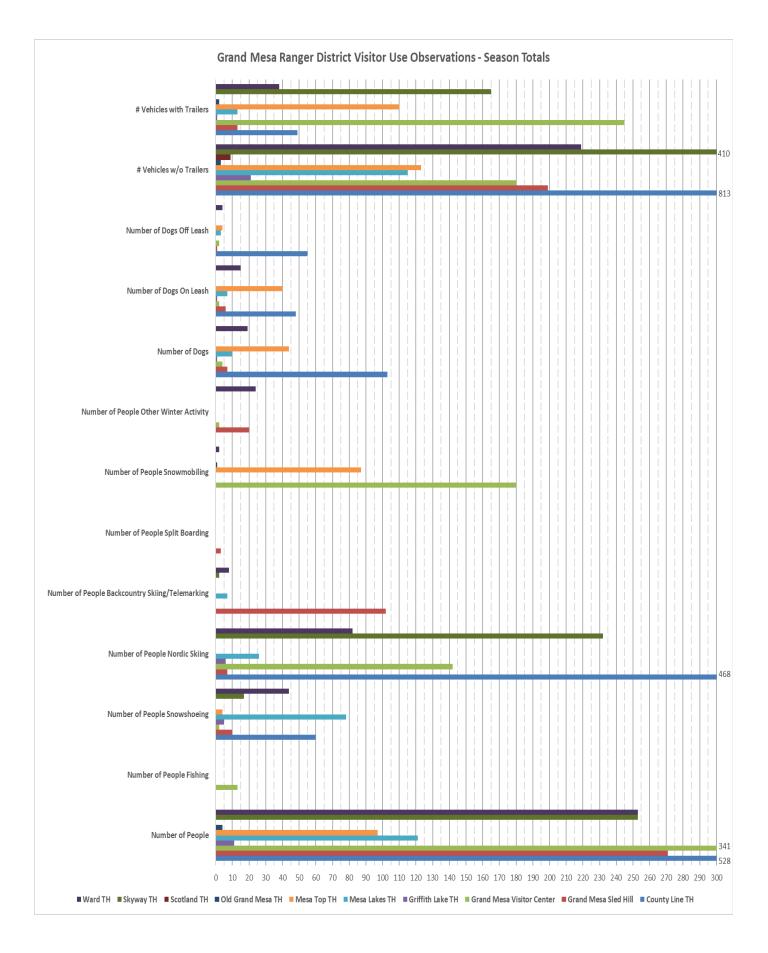
A two-day Rocky Mountain Dogsled race held at Mesa Top TH





During a Friends of Youth and Nature event, Kelly clears ice from an ice fishing hole and a CPW Officer displays a freshly caught Rainbow Trout. The event was attended by nearly 80 at-risk children, young adults, and their families.

Finally, Snow Rangers working Grand Mesa used the CMC RIMS mobile app to collect data points at parking lots and trail heads within Grand Mesa National Forest that are helpful for documenting visitor use. The data points help to show popular recreation areas for various user groups, identifies vehicle and trailer pressure at parking lots, tracks pet use and allows for easy record keeping for trail maintenance requirements. Our Snow Rangers logged thousands of visitors and vehicles this season, potentially influencing future land management policy changes.

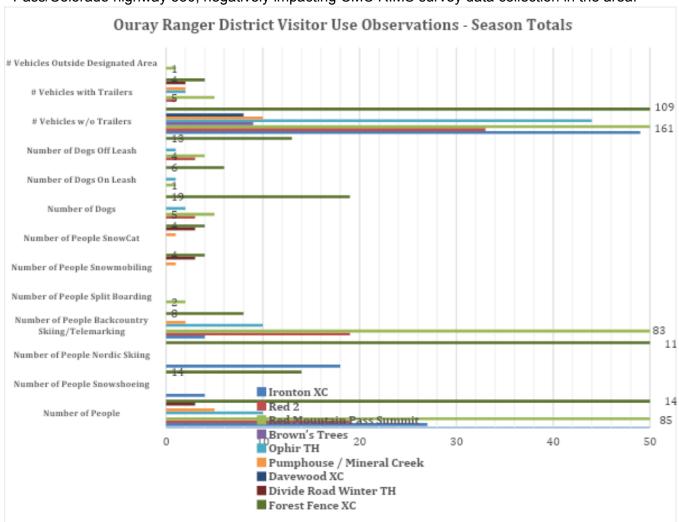


Ouray Ranger District

Snow Ranger Kricket Olin and USFS Ranger Eric Sumner led operations in the Ouray District and started strong by improving XC skiing at the Uncompander National Forest, Divide Road Nordic trail system. In early January, Eric tracked in and packed the XC ski trail route, helping to better skiing opportunities in the area. Matt and Kricket then fostered professional relationships throughout the winter and were trusted by UNA to operate the club's snowmobile grooming equipment to complete seven periodic grooming runs, preparing 15 miles of XC ski trail for public use during each run. Also, this season in the Uncompandere, Matt and Kelly accompanied Eric on a USFS timber sale patrol covering 82 miles by snowmobile. Timber sale boundaries were checked, access roads were surveyed, and permit compliance was confirmed.

On Red Mountain, Wilderness boundaries were a safety concern and our team jumped into action. Three avalanche transceivers were installed by Kricket and Eric, one each at Red Mountain, Ophir Road, and San Juan Vista trail heads. Three necessary Wilderness boundary signs were also installed at West Fork. Good land management partnerships were strengthened during a group ride organized by Kricket with the Arrowhead Snowmobile Club. Trail markers installed by the club were inspected, confirming permit compliance.

Unfortunately, less time was spent by Snow Rangers in the Ouray district this year due to shifting priorities and one less employee covering the area. These conditions limited patrols on Red Mountain Pass/Colorado highway 550, negatively impacting CMC RIMS survey data collection in the area.







Kricket and Eric discover a recent avalanche while patrolling the US Basin area (left). Eric and Kelly mark an exposed t-post while patrolling Divide Road (right).

The Snow Ranger team was lucky and thankful to be able to participate in a three-day, two-night hut trip patrol with San Juan Huts in the Ouray District. Day one included a 6.7 mile, 1,930' skin ascent to the Ridgway hut, contacting eight backcountry skiers/split boarders along the way while surveying trail conditions. Day two covered a 4.2-mile skin traverse from the Ridgway hut to the Burn hut. A group of seven, including Germans and Americans who familiar with European hut trips were encountered along the way. Day three concluded with a 5.4-mile ski out, contacting five backcountry hikers and backcountry skiers.





(Left photo, left to right) Kelly, Matt, Kricket, Eric, Lacie, and Neil stop for a morning photo outside of the Ridgway Hut. Corbett Ridge stands in the background of a quiet skiing trail (right).

Looking Ahead

Grand Valley Ranger District - Looking Ahead

There are approximately nine major parking areas on Grand Mesa that are popular for winter use. The parking lots, especially at Skyway and County Line trail heads, see the most traffic. This year they were not observed to run out of parking space; however, they were close to capacity on a few occasions and should continue to be monitored. Similar concerns occur at the Mesa Top parking area, primarily used by snowmobilers. While this parking area is physically large, it fills up quickly due to trucks and large trailers using it. It is recommended that this parking lot be converted to one-way use, which will reduce confusion by providing better parking directions for the public.

It would be wise to connect with Colorado Parks and Wildlife and get a better understanding for when they plan to patrol for OHV registrations and inquire if they do any visitor education when they are out.

Connecting with the Grand Mesa Nordic Council is helpful at the beginning of the season, as their members are on the Mesa every day. They have helpful information about things such as snowmobile incursions on ski trails, parking information, and other relevant events that occur on Grand Mesa.

Ouray Ranger District - Looking Ahead

Red Mountain Pass covers 4 jurisdictions: Ouray County, San Juan County, Ouray Ranger District, and the Columbine Ranger District. Before the next winter season starts, we recommend that stakeholders (USFS, Friends of the San Juans and representatives from the main guide groups: San Juan Guides, Peak Guides, San Juan Expeditions, and Silverton Avalanche School) have a meeting to learn what various groups are doing and how to best coordinate efforts on Red Mountain Pass.

It is important that the Snow Rangers know Red Mountain Pass. This north/south travel corridor has more than 25 popular lines to ski and several large drainages that require backcountry travel further from the highway to reach. There are over 150 avalanche paths that affect the highway and more that affect backcountry ski routes. A very basic understanding takes a minimum of one season in the area.

RIMS App

Consistent naming conventions in the RIMS app make data analysis much easier later in the season. This list is provided for reference during the upcoming 2024/25 season.

Grand Valley Ranger District - Grand Mesa Sled Hill, Mesa Lakes TH, Griffith Lake TH, Skyway TH, Mesa Top TH, County Line TH, Grand Mesa VC, Ward TH.

Ouray Ranger District - County Rd 5 TH, County Rd 7 TH, Dave Wood XC Ski, Divide Road Winter TH, Hwy 90 Snowmobile Parking, Little Cimarron TH, Vista Point TH, Camp Bird Road.

Red Mountain Pass: Engineer Pass TH, Ironton TH, Ironton XC, Red 2, MacIntyre, Upper Commodore, RMP Summit, Yard Hut, Chattanooga/ Artist Cabin, Sam's, Brown's, Ophir, Pumphouse/Mineral Creek.

Thoughts and Recommendations for Next Year

- 1. Hire 2024/25 Snow Rangers early in December 2024, allowing for better planning and coordination between clubs and events. Hiring early also allows Snow Rangers time to get winter specific signs and beacon check stations installed at trail heads, increasing safety on public trails.
- 2. Pursue educational opportunities and trainings, particularly entry level avalanche training for all employees. Also, avalanche level two and wilderness first-aid would not only benefit returning employees but also the public that we interact with.
- 3. New wilderness boundary and "no snowmobiling" signs are needed surrounding the Skyway, County Line and Ward XC ski corridors. Posts and signs need to be installed in the fall.
- 4. Coordinate with Thunder Mountain Lodge for intermediate snowmobile and avalanche training.

Suggested Gear for 2024

- Two-way radios
- New split board skins

Many thanks to our incredible partners who made this season's program possible!





