

SHENANDOAH NATIONAL PARK

WINTER OPERATIONS PLAN

November 1988

WINTER OPERATIONS PLAN

Table of Contents

- I. Introduction
 - A. Winter Operations Policy
 - B. Weather Patterns
 - C. Winter Visitor Use Patterns, Facilities and Services
- II. Division Responsibilities
 - A. Superintendent's Office
 - B. Maintenance Division
 - C. Interpretive Division
 - D. Ranger Division
 - 1. District Ranger
 - 2. Entrance Station Personnel
 - 3. Dispatch Office
 - E. ARA Virginia Sky-Line Company Unit Managers
 - F. Suggestions for Resident Employees and Their Families
- III. Winter Operations
 - A. Road Condition Reporting
 - B. Closing Procedures
 - C. Snow Removal Policy
 - D. Opening Procedures
 - E. Utility Outages
 - 1. Reporting
 - 2. Emergency Radio System
 - 3. Emergency Power Supplies
 - 4. Closing of Administrative Offices

F. Gates, Locks and Keys

G. Tire Requirements

H. Administrative Roads

I. Emergency Housing for Park Residents

J. Sanitation

IV. Annual Review

Appendices

I. Introduction

A. Winter Operations Policy

All winter operations, including plowing and sanding Park roads and other preventive and reactive activities, will be undertaken to provide the public a safe and rewarding winter Park experience; ensure the safety and well-being of Park and concession employees and their resident families; and protect public and private property from loss or damage.

During the winter season, fluctuating visitor use patterns may combine with varied and unpredictable weather patterns to create potentially serious situations. The overall objective is to keep the Park open, safe, and accessible to visitors to the greatest feasible extent. Other objectives, in priority order, are as follows:

1. Provide for present visitor and employee/family safety.
2. Prevent loss or damage to structures and facilities.
3. Provide continuity of Park administrative operations.
4. Provide safe visitor access from Thornton Gap to Big Meadows from 10 a.m. through 5 p.m. minimum on weekends from October 1 to April 30; from 12 noon through 5 p.m. on weekdays when concession and campgrounds are open.
5. Provide access to residential areas for Park residents, not otherwise provided in item numbers 1 and 2 above.
6. Provide full Park access for visitors.

B. Weather Patterns

Shenandoah National Park may experience winter weather conditions from mid-October through early April. Temperatures may range from over 70 degrees F. to -20 degrees F., generally with accompanying high relative humidity. Precipitation may take many forms including rain, freezing rain, ice, and snow which may accumulate from several inches to several feet.

C. Winter Visitor Use Patterns, Facilities and Services

1. October 1 - December 31

Park visitation reaches its peak during color season in October then tapers to several hundred cars per day by late December. Most campgrounds and some concession facilities close on or about November 1. Big Meadows Lodge and Wayside, as well as Big Meadows Campground remain open through New Year's weekend. Backcountry use drops off rapidly after color season.

Dickey Ridge Visitor Center usually closes the first Sunday in November. Byrd Visitor Center remains open seven days per week. Scheduled interpretive activities are available on a regular basis.

2. January 1 through February 28

Visitation is lowest during these months. Backcountry use is generally low but can become significant during unseasonably warm weekends.

All campgrounds and concession facilities are closed during these months. The Byrd Visitor Center operates on a reduced schedule, generally open four days a week, Friday, Saturday, Sunday and Monday.

3. March 1 through April 30

Visitation increases with warmer weather. Backcountry use becomes heavier, especially on weekends. Big Meadows campground and most concession facilities reopen during this period. The Byrd Visitor Center resumes seven days per week operations. Dickey Ridge Visitor Center reopens in late March.

II. Division Responsibilities

A. Superintendent's Office

1. Establish Park's overall winter operations policy after reviewing visitor protection and visitor use concerns; energy and budget considerations; and obligations to concessioners.
2. Coordinate annual winter operations meetings with both the ARA Virginia Sky-Line Company and the Park staff.
3. Conduct annual review and approval of Winter Operations Plan.
4. Write/distribute media releases on conditions and available facilities.

B. Maintenance Division

1. Install (by October 1) and maintain snow gates.
2. Install and maintain signs relevant to winter operations.
3. Establish emergency or automatic call-out procedures for mobilizing snow plow crews during weekends and off-duty hours.
4. Provide the Dispatcher, Division Chiefs and District Supervisors a winter maintenance call-out list indicating names and phone numbers in priority order. All call-outs are the responsibility of the Maintenance supervisors.

5. Coordinate reporting of and follow-up on power and telephone outages to all utility companies.
6. Supply and maintain emergency power Park-wide within a reasonable time to as many offices, shops and residences as feasible, using portable generators.
7. Plow snow and remove ice according to Park policy as outlined in this Plan.
8. Provide necessary assistance to visitors and employees as requested, including assisting in convoy operations to remove stranded visitors from the Park.
9. Ensure that Park's radio system is kept operational using normal or emergency power sources.
10. Keep snow removal equipment in a "ready to go" condition.
11. Ensure all Division winter use vehicles are equipped with chains, snow shovels, flares, first aid kits, etc.
12. Ensure gasoline pumps are converted to manual dispensing systems during power outages.
13. Ensure all official vehicles are operated with the equipment required by current road postings.

C. Interpretive Division

1. Emphasize the hazards of winter environment during interpretive programs and informal contacts.
2. Stress safety, dangers and hypothermia, and opportunities for safe winter use when issuing backcountry permits or during informal contacts. Keep visitor information and bulletin boards up to date.
3. Maintain a cache of blankets, rations, and first aid equipment in each visitor center sufficient to cope with stranded visitors needing aid and/or assistance.
4. Post up-to-date weather, road condition information, and travel advisories at each visitor center.
5. Update TIS with current road/weather information.
6. Assist Ranger Division with traffic control, first aid, and other emergency operations as necessary.
7. Ensure that all Division winter use vehicles are equipped with chains, snow shovels, flares, first aid kits, etc.

8. Ensure all official vehicles are operated with the equipment required by current road postings.
9. When road to Big Meadows is closed during work hours, open Thornton Gap information station and restrooms.

D. Ranger Division

1. District Rangers

- a. Make road opening and closing decisions in consultation with District Roads and Trails Foremen.
- b. Decide appropriate road condition postings and snow tire requirements and ensure they are posted promptly.
- c. Account for visitors stranded on the Drive, in the lodges, campgrounds or backcountry due to storm or poor road conditions and coordinate their evacuation as necessary.
- d. Maintain at a central location (Piney River, Big Meadows and Simmons Gap) a cache of blankets, drinking water, flashlights, lanterns, emergency rations, and first aid supplies for emergency use of stranded Park visitors and/or Park employees and their families.
- e. Ensure that snow gates are adequately signed and warning lights are installed and in working order. Gates and lights are checked twice daily during closed periods.
- f. Keep portable radios in working order and ensure adequate distribution.
- g. Ensure all District winter use vehicles are equipped with fuses, snow chains, shovels, first aid kits, etc.
- h. Notify all Park visitors of road closing either in person or by note left on vehicle. (See Appendix 1.)
- i. Notify ARA management and visitor centers of road conditions and plans for opening.
- j. Patrol closed sections of Drive once per day, if possible, to check on road conditions, remaining visitors, vehicles, gates, etc.
- k. During prolonged power outages assist, if manpower is available, the Maintenance Division in keeping portable generators operational.
- l. Ensure all official vehicles are operated with the equipment required by current road postings, with exception of snow removal equipment.

2. Entrance Station Personnel

- a. Inform visitors of up-to-date road conditions and Park information and activities and campground and concession operations, including days and hours of visitor center operations.
- b. Post current road conditions on status board at direction of the District Ranger.
- c. Post current travel advisements, tire restrictions on status board at direction of District Ranger.
- d. Have information available on Park activities near the entrance station or accessible from the boundary for visitors arriving when the Drive is closed.
- e. Inform all Park visitors of hazards of winter camping, hypothermia, etc.
- f. Maintain accurate records of location of backcountry campers by locations using permit files.

3. Dispatch Office

- a. Maintain up-to-date log of road conditions, tire requirements, travel advisories and proposed opening and closing times so telephone inquiries can be accurately answered.
- b. Broadcast, as appropriate, NWS and local weather forecasts.
- c. Notify Maintenance supervisory personnel of conditions and/or need for snow removal as requested by Rangers during non-business hours.
- d. Notify utility and telephone companies of power and telephone outages in the absence of the Maintenance Division Secretary. Maintain a log of power and phone status, and follow up as necessary.
- e. Enter on VCIN up-to-date Park road condition information for State-wide broadcast.
- f. Remain on duty until all visitors are safely evacuated and all employees and residents are safely accounted for or until relieved by Chief Park Ranger.

E. ARA Virginia Sky-Line Company Unit Managers

- 1. Keep guests, customers and employees informed of current weather forecasts, road conditions, travel advisements and restrictions.

2. Maintain adequate supplies of food, gasoline, firewood, emergency tire chains, etc., to accommodate overnight guests during winter emergencies.
3. Provide warm and cold beverages at Big Meadows when visitor center is in operation throughout the year.
4. Clear areas of snow within scope of responsibility.
5. Ensure ARA vehicles are equipped with chains, shovels, etc., and that vehicle equipment conforms to current road posting requirements.
6. Assist Ranger personnel in forming caravans when guests require evacuation.
7. Upon request, close the gates at Big Meadows or Skyland to prevent visitors at these locations from entering the Skyline Drive.

F. Suggestions for Resident Employees and Their Families

1. Limit non-emergency travel, unless absolutely necessary, until the road is safe to do so.
2. Keep canned goods on hand sufficient for several meals during power outages.
3. Consolidate food stuffs into one community refrigerator/freezer if possible.
4. Rotate available emergency generators between residences to run furnaces and keep freezers from thawing.
5. Equip and operate private vehicles to conform with road posting requirements.

III. Winter Operations

A. Radio Condition Reporting

1. Radio

Between November 1 and April 1, each Ranger District will broadcast anticipated road conditions for the current day as part of the morning report. This report will be broadcast at 0815 or as soon as possible thereafter when conditions are known. The road condition report will include such details as whether the District is open or closed; anticipated opening time; hazardous areas, travel advisements and tire requirements.

2. Signing

Road conditions will be updated as frequently as necessary and posted conspicuously at each entrance station. Entrance station

personnel are responsible for posting appropriate road condition, travel advisement; tire restrictions; and current status of lodges and campground facilities.

B. Closing Procedures

The decision to close portions of the Skyline Drive rests solely with the District Rangers or their designates in consultation with the District Roads and Trails Foremen, as necessary. Closing and subsequent evacuation procedures may be based on either actual or predicted adverse weather conditions. The District Ranger may, at his/her discretion, authorize increasingly more restrictive tire and/or chain requirements before the final decision to close is made.

As many visitors as practical will be contacted and evacuated as necessary. Visitors with a bona fide reason for remaining in the Park, such as lodge guests, backcountry campers or PATC cabin occupants, may remain if they satisfy Ranger personnel that: 1) they are prepared for the anticipated weather conditions, and 2) they are willing to remain until the storm or poor road conditions subside and plowing operations allow the Drive to be reopened.

When the Drive is closed due to hazardous road conditions, travel is authorized only for Park vehicles and ingress/egress of resident employees and their families, and authorized concessioner and contractor vehicles. Access to lodges, campground, PATC cabins, etc., may be limited for the duration of the closure. Dispatch will be notified immediately upon changes in tire requirements, road conditions, closings and openings.

C. Snow Removal Policy

Snow plowing will begin as it becomes necessary during the day or night to meet the objectives stated on page one, including ensuring that Skyline Drive is open to visitor travel from Thornton Gap to Big Meadows by 10 a.m. on weekends all winter, and by 12 noon on weekdays when concession and campground are operating. Priorities for snow removal activities are as follows:

1. Extricate stranded visitors along Skyline Drive.
2. Provide access to Skyline Drive for identified emergency response equipment parked in garages, etc., and plow to emergencies as they develop.
3. Provide access to administrative offices.
4. Open road from Thornton Gap to Big Meadows as above.
5. Provide access to NPS housing unless emergency access is required.

6. Provide access to communications equipment sites. If equipment is malfunctioning and immediate access is required, it should be accomplished after priority #2.
7. Open other visitor use areas and portions of Skyline Drive as appropriate based upon current and predicted weather conditions.

D. Opening Procedures

The decision to open portions of the Drive rests solely with the District Rangers, or their designees, in consultation with the District Roads and Trails Foremen.

The Drive will be opened to the public as soon as the road surface is deemed safe to travel with or without travel restrictions.

The District Rangers are responsible for informing the Dispatch Office and the appropriate entrance stations of 1) estimated time of opening, 2) road condition postings, and 3) tire or chain restrictions. These advisements will be updated as necessary.

E. Utility Outages

1. Reporting

All disruptions in electric or telephone service will be relayed to the Dispatch Office where that office will log the information and relay it to the Maintenance Division's Secretary for action and follow-up. In the absence of the Maintenance Division's Secretary, the Dispatch Office will initiate repair requests for power, but will contact the Chief or Assistant Chief of Maintenance by telephone.

2. Emergency Radio System

In the event of power outages, every reasonable effort will be made to maintain emergency radio communications. As continuous emergency radio communications are vital to evacuation, search and rescue and other emergency efforts, this facet of winter operations shall share the highest priority with protection of life. The Maintenance Division is responsible for the initial installation and conversion of the radio system to an auxiliary power system. The Ranger Division will assist in refueling and/or servicing such systems as necessary.

3. Emergency Power Supplies

During periods of power outages, the Division of Maintenance will coordinate the installation and servicing of all available auxiliary power systems. Priorities for use of portable generators shall be decided by the Chief of Park Maintenance in conjunction with the Chief Park Ranger and Chief Park

Naturalist. Highest priorities include the maintenance of communication systems, heating systems, and refrigeration of food stuffs, as well as key administrative sites. Non-essential services, functions and amenities may necessarily be shut down for the duration of the power outage.

4. Closing of Administrative Offices

When, in the judgment of the immediate supervisor, working conditions deteriorate due to heat loss or power failure to the degree that employee's health or safety is threatened, affected employees may be detailed to other activities. With the approval of the Superintendent, employees may be given administrative leave and buildings closed until normal activities can be resumed. Employees are expected to dress for deteriorated conditions during prolonged periods of bad weather.

F. Gates, Locks and Keys

It is the policy of Shenandoah National Park that, when the Skyline Drive is closed to vehicular traffic, that all gates be shut and positively locked.

The only exception to this policy is when traffic is still being evacuated from portions of the Drive after the decision to close has been made. In this case, the inbound gate shall be closed and the stabilizing legs deployed to prevent movement. The ROAD CLOSED sign should be displayed on the inbound gate. Blinking lights and warning signs, e.g., BARRICADE AHEAD, must be in use.

No "false locking" of gates is authorized. This policy is applicable to employees of the ARA Virginia Sky-Line Company as well as to NPS employees. Employees violating this policy are subject to loss of key privileges, and/or disciplinary action.

Contractors and concessioners having gate keys may enter at their own risk to check work sites and facilities as necessary in the course of their operations. Vehicles must be properly equipped, including snow tires and chains before entering a closed area.

Lodge guests and those visitors holding reservations for PATC closed cabins are subject to road closures which limit their access to the Park. (See Concessions Operating Plans.)

G. Tire Requirements

All vehicles entering the Park or traveling on Park roads are expected to have tires and/or chains which conform to the current road posting requirements. This requirement applies to Park, concession and contractor's vehicles, as well as those operated by Park visitors. Entrance station personnel will enforce the current tire requirements. Further definitions are included in Appendix 3.

H. Administrative Roads

The Tanners Ridge administrative road will be plowed as a low priority. No other administrative roads will be plowed unless circumstances dictate it.

I. Emergency Housing for Park Families

When prolonged power outages or locally severe weather conditions prevail, Park residents holding required occupancy and who desire it may, on a case-by-case basis, and when approved by the appropriate Division Head, be evacuated and housed in local motels if health and safety considerations become critical. These provisions will apply to residents living in high elevation housing areas along the Drive (Dickey Ridge, Piney River, Pinnacles, Skyland, Big Meadows, Simmons Gap and Loft Mountain) and only when local communities are not similarly affected by power outages or locally severe weather. These provisions will not apply to those residents occupying quarters on a permitted basis nor to those living in low elevation housing areas (Front Royal, Headquarters, and Sawmill Run). Per diem costs will be assumed by the benefitting account.

J. Sanitation

When Park and concession public restrooms are closed for the winter, the Chief of Park Maintenance will coordinate the procurement and placement of temporary sanitary facilities at the following locations:

1. Elkwallow Wayside.
2. Byrd Visitor Center.
3. Loft Mountain Wayside.

IV. Annual Review

Comments and proposed changes to the Winter Operations Plan will be forwarded to the Assistant Superintendent by October 1. A fall meeting will be held in early October to review the plan and decide on any changes proposed. Representatives of the ARA Virginia Sky-Line Company will be included in this meeting or will be invited to a separate winter operations planning session.

The Assistant Chief Park Ranger shall annually revise the Winter Operations Plan and mimeograph winter handouts as necessary at the direction of the Superintendent.

Shenandoah

National Park
National Park Service
U.S. Department of the Interior

SNP-12

Rev. 11/88

Your Winter Visit

Hazardous road conditions during and following winter storms may make it necessary to close sections of the Park's motor road at various points of entrance and exit at any time. The section of the Drive from U.S. 211 at Thornton Gap to Big Meadows is kept clear except during extremely adverse conditions. We ask that you become familiar with the following information and comply with its warnings, suggestions and requirements.

Be Prepared...

If you plan to remain overnight in the Park with your vehicle, it should be equipped with snow tires and tire chains. These items will be recommended and/or required when road conditions warrant their use.

Keep your gas tank filled and include emergency rations, warm clothing, and a snow shovel. Snow tires or chains may become required. These requirements are posted at Park entrances and are enforced.

Snow Removal

During periods of heavy snow and during daylight hours, the Park will endeavor to keep Skyline Drive open for official vehicles or emergency egress of visitors along the Drive who were camped overnight and trapped by a storm. Owners must assume the expense and responsibility for removal of snowbound vehicles on roads. Visitors stranded in the Park due to snow or ice will be notified of when and where to meet. Caravans of private vehicles will be escorted out of the Park once the roads are safe to travel.

PRIORITY ONE: From U.S. 211 (Mile 31.5) south to Big Meadows (Milepost 51); from U.S. 211 north to Piney River (Mile 22.1); from U.S. 33 (Mile 65.6) south to Simmons Gap (Mile 73.2).

PRIORITY TWO: The remainder of the Drive.

Should You Become

Stranded:

Do not rely solely on routine patrols as a means of obtaining assistance. Ranger patrols during winter months are generally limited to one patrol per day, road conditions permitting. Rangers are stationed at Piney River (Mile 22.1), Big Meadows (Milepost 51) and Simmons Gap (Mile 73.2). Leave a note on your vehicle before you go for help. Include your name, address, destination, and time and date of departure. You should be properly equipped and familiar with the territory before leaving your vehicle. When the motor of a vehicle is running, a window should be opened to allow ventilation and thus prevent asphyxiation from carbon monoxide poisoning. Backcountry campers: Do not abandon your gear. During the months of January and February, there are no services available along the Skyline Drive.

Locations of Pay Phones:

1. Dickey Ridge - Mile 4.6
2. Mathews Arm Campground - Mile 22.2 (half mile walk from Drive, entrance road closed)
3. Elkwallow Wayside - Milepost 24
4. Thornton Gap - Mile 31.5
5. Skyland Lodge - Mile 41.7 (near office)
6. Byrd Visitor Center - Big Meadows - Milepost 51
7. Big Meadows Wayside - Mile 51.2
8. Big Meadows Campground - Mile 51.2
9. Lewis Mountain - Mile 57.5
10. Loft Mountain Wayside - Mile 79.5
11. Swift Run Entrance Station - Mile 65.6
12. Chevron Service Station - Afton Mountain - Rockfish Gap
13. Park Headquarters - U.S. 211

Facilities Available

AT MILE 4.6

DICKEY RIDGE VISITOR CENTER

November 13 through November 27, 1988 OPEN WEEKENDS
December, 1988 to late March, 1989...CLOSED

AT MILE 41.7

SKYLAND LODGE

November 1-27, 1988 OPEN
November 28, 1988 - March 22, 1989...CLOSED
March 23, 1989.....OPEN

AT MILEPOST 51

BIG MEADOWS CAMPGROUND

November 1, 1988 - January 2, 1989....OPEN
January 3, 1989 - March 2, 1989.....CLOSED
March 3, 1989.....OPEN

BYRD VISITOR CENTER

November 1 - December 31, 1988...OPEN daily 9-5
January 1 - February 28, 1989....OPEN Fri-Mon 9-4
March 1, 1989.....OPEN daily 9-5

BIG MEADOWS LODGE

November 27, 1988 - January 2, 1989 until 6 p.m. OPEN
(closed noon December 24 - 25, 1988)
January 3 - March 2, 1989.....CLOSED
March 3, 1989.....OPEN

BIG MEADOWS WAYSIDE

November 1, 1988 - January 2, 1989....OPEN
January 3 - March 2, 1989.....CLOSED
March 3, 1989.....OPEN

For Park Information - Call 1-703-999-2266
For EMERGENCIES - Call 0-703-999-2227
(Collect)



NOTICE FOR WINTER GUESTS

Severe winter storms and hazardous road conditions may cause the National Park Service to temporarily close Skyline Drive, both north and south of Big Meadows.

Lodge guests should do the following if stranded by a winter storm:

1. Check at the registration office for current road conditions. Please do not attempt to move private vehicles until the road surface has been cleared for safe travel.
2. At no time should guests go through any gate or barrier which is posted "Road Closed."
3. In the event of major storms or snowfall accumulation, guests will be evacuated by Ranger escorted caravans, enabling all guests to exit the Park safely. Check at the registration office for when and under what restrictions travel may proceed.
4. Winter storms are often accompanied by prolonged power outages. Please check at the registration office for the proper procedures to follow.
5. Should a temporary closing of the Skyline Drive become necessary, the ARA Virginia Sky-Line Company, Inc., maintains adequate supplies of food, fuel and emergency tire chains for the convenience and comfort of its guests.
6. If you have other questions pertaining to your visit to Shenandoah National Park, please check at the registration office.

Have a safe and enjoyable stay in Shenandoah National Park this winter.

THE MANAGEMENT AND STAFF OF
ARA VIRGINIA SKY-LINE COMPANY