Rocky Mountain Ramblers

General Information Guide

Sep 2023 edition

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FOREWORD

As part of a club initiative to keep members informed of key Risk Management issues and club policies, the RMRA maintains three separate Guides:

Outdoor Activities Guide:

This Guide contains information that is referenced by, and forms part of, the RMRA Release of Liability, Waiver of All Possible Claims and Assumption of Risk form. Topics covered include:

- Description of Activities
- Associated Risks and Hazards
- RMRA Risk Management Policies and Guidelines
- Trip Participants' Responsibilities
- Trip Coordinator's Responsibilities
- RMRA Trip Rating System

This Guide also has the terms of membership that is referenced by, and forms part of, the RMRA Member's Agreement.

⇨ ***This Outdoor Activities Guide must be read and understood as an integral component of the Membership Application Process. Anyone who is unclear about this material should consult with a member of the Executive.***

Trips List Guide:

This Guide has lists of summer trips (hiking, scrambling, mountaineering) and winter trips (track-set skiing, backcountry skiing, ski mountaineering, snowshoeing) that have been assigned ratings by club Coordinators. The most up-to-date version is on the website Research a Trip function.

General Information Guide:

This Guide has general information on the club (history, committee structure, bylaws) and articles on outdoor topics.

Guide Updates

From time to time the club will issue updates to keep the Guides current. It not anticipated that the Outdoor Activities Guide or the Trips List Guide will expand a great deal, and updates to them will commonly be page replacements. The General Information Guide may experience the most growth with additional outdoor topics.

Website

The RMRA maintains a website at www.ramblers.ab.ca. The public area of the site has online copies of these guides in addition to membership application forms, reports on recent trips, online copies of current and historical newsletters, and other general information. The members' area of the site has information on upcoming trips, social events, meetings, courses, and programs. Members are given passwords to gain access to the members' area.

The Association

The Rocky Mountain Ramblers Association, the "RMRA", is a not-for-profit organization registered under the Societies Act of Alberta. It is a member of the Calgary Area Outdoor Council ("CAOC"). The RMRA may be contacted by mail or email:

Rocky Mountain Ramblers Association
PO Box 75044 Cambrian
Calgary, Alberta T2K 6J8

Email: See website for current address

UPDATES

From time to time this Guide will be updated. The following table shows the substantive changes made with each update. The table does not show minor changes such as re-formatting, spelling corrections, or improved grammar. You can ensure your copy of the Guide is current by checking page dates located in the bottom margin.

A sidebar on the left margin indicates the substantive changes to the most recent update.

Updates to the General Information Guide

DATE	PAGE	CHANGES
Apr 2001	I - VI 1 - 40	- New revision
Dec 2001	7 15 18 41 - 47	- Membership year ends November 30th - 30 day membership grace period eliminated, trip signup sheet replaces trip waiver form, postal or electronic mail for notices - New members joining "after Sept 1", replaced "after Aug 1" - Map and Compass Reading
Apr 2003	IV 10 11 13 48 - 51	- all phone numbers updated and verified - email notification option for new Packrat - members' name preference for trips reports and Packrats: full name, or first name only - secretary has custody of Association Seal - Leave No Trace
Oct 2008	17	- Formula for Political action
Nov 2011	II 8 10 11	-delete phone line references -delete phone line and meeting info references -delete PackRat references -delete phone line references, revise privacy info
Jan 2015	many	-change safety to risk management wording -eliminate obsolete functions for Executive
Sept 2023	Ch.1 Ch.2 Ch.3 Ch.4	Update membership chart Update Guest policy wording; other revisions to reflect electronic options available Revised Exec duties to eliminate obsolete duties and add newer ones; new position added Incorporates Bylaw updates

PHONE NUMBERS, SUGGESTED READING

EMERGENCY (24 hr)		yr
general emergency	911	
Kananaskis Country	403-591-7767	03
Banff, Yoho, Kootenay Parks	403-762-4506	03
Jasper Park	780-852-6155	03

PARK INFO CENTRES		
Kananaskis (Elbow)	949-4261	03
Kananaskis (Barrier Lake)	403-673-3985	03
Kananaskis (Peter Lougheed)	403-591-6322	03
Banff (Banff)	403-762-1550	03
Banff (Lake Louise)	403-522-3833	03
Jasper (Icefields - summer)	780-852-6288	03
Jasper (Jasper)	780-852-6176	03
Mt Robson	250-566-4325	03
Yoho (Field)	250-343-6783	03
Glacier (Rogers Pass-summer)	250-837-6274	03
Glacier (Revelstoke)	250-837-7500	03
Mt Assiniboine (Wasa)	250-422-3212	06

PARK RANGER/WARDEN		
Kananaskis (Peter Lougheed)	403-591-7222	06
Banff (Banff)	403-762-1470	03
Banff (Lake Louise)	403-522-1220	03
Jasper (Sunwapta)	780-852-5383	03
Jasper (Jasper)	780-852-6156	06
Yoho (Field)	250-343-6142	03
Kootenay (Radium)	250-347-9361	03
Glacier (Rogers Pass)	250-814-5202	03
Waterton	403-859-2477	03

GENERAL OFFICES		
Kananaskis (Canmore)	403-678-5508	03
Parks Canada (Calgary)	403-292-4401	03
Bow Valley Prov Park	403-673-3663	03

AVALANCHE REPORTS		yr
Canadian Avalanche Centre	800-667-1105	03
Banff, Yoho, Kootenay Parks	403-762-1460	03

WEATHER REPORTS		
Banff	403-762-2088	03
Jasper	780-852-3185	03
BC (Columbia Mtns)	250-837-4164	03
AMA Road Report	246-5853	03

RENTALS		
U of C Outdoor Centre	220-5038	11
Mountain Equipment Co.	269-2420	03

RESERVATIONS		
ACC Clubhouse, Huts	403-678-3200	03
Hostels - Banff, Ribbon Crk, Castle Mtn, Whiskey Jack, Mosquito, Rampart, Hilda	403-762-4122	03
Hostels - Beauty, Athabasca, Edith Cavell, Maligne, Jasper	780-852-3215	03
Hostel - Lake Louise	403-522-2200	03
Travel Alberta	800-661-8888	03

Notes:

yr = year verified

Local calls as from Calgary

Hiking Guidebooks

"Kananaskis Country trail guide, Fourth Edition (5 Volumes)", Gillean Daffern

"The Canadian Rockies Trail Guide", Brian Patton & Bart Robinson

"Scrambles in the Canadian Rockies", Alan Kane

"Footloose in the Columbias", The Friends of Mt Revelstoke and Glacier

"Hiking the Historic Crowsnest", Ross & Tracy

“Hiking Alberta’s David Thompson Country”, Pat Kariel and Eric Schneider

“Hiking Canada’s Great Divide Trail”, Dustin Lynx

Skiing Guidebooks

"Kananaskis Country Ski Trails", Gillean Daffern

"Ski Trails in the Canadian Rockies", Chic Scott

"Summits and Icefields", Chic Scott

General Backcountry Information

"Mountaineering: The Freedom of the Hills", The Mountaineers

"The Complete Walker III", Colin Fletcher

"Bear Attacks, Their Causes and Avoidance", Stephen Herrero

"Avalanche Safety for Skiers and Climbers", Tony Daffern

"The Outward Bound Wilderness First Aid Handbook", Jeff Isaac, Peter Goth

"The Complete Guide to Wildflowers of the Rockies", Dana Bush

"Handbook of the Canadian Rockies", Ben Gadd

[40th anniversary hike up Yamnuska, May/94]

[40th anniversary stampede breakfast, July/94]

CHAPTER 1: CONDENSED HISTORY

The information contained herein came from the RMRA History "The First 27 Years", covering the period March 2, 1954 to March 2, 1981. This entertaining 86 page book chronicles the major events and achievements of the Ramblers. Many people spent a good deal of time compiling the book, including present members Marg Lowndes, Anne Moran and Wally Drew. The History comes alive with personal anecdotes, and gives an insight into how the club, how its members, and indeed how society has changed over the years. The intent of this chapter is not to repeat what is already well documented, but is to give a brief overview of those years, to perhaps whet your appetite. You will find that the Ramblers has a rich history, and that it's activities in those early years were more far reaching and varied than they are today. It is said history often repeats itself. If you feel the RMRA today could use a shot in the arm, or perhaps you would like to see it try some things 'new', then it is very worth your while to know it's past. Chances are the club successfully did those 'new' activities years ago. Many members who were there then are with us here today. Know the past and listen to their advice. You will benefit by gaining a respect for what can be done within the RMRA, and the club will benefit from your subsequent involvement.

Beginnings

The early 1950's were full of optimism for Calgarians. Young people in their 20's and 30's had grown up in the Depression, and if they had not participated in WW II, they were certainly affected by it. Those two great events molded self-reliant people who made the best of what they had to work with. A sense of community, in helping your neighbor, was probably stronger then than it is today. When you read the History of the Ramblers it is easy to discern these two qualities; self-reliance, and a sense of community. In the post war boom of the 1950's young Calgarians had unprecedented opportunities to explore their natural surroundings.

In 1954 people could camp at will in the Mountain Parks and cut deadwood for fires or shelters. The 1A highway was the 'Trans-Canada', and sometimes it took 3 hours to drive from Calgary to Banff. You took the train to Rogers Pass, as the highway did not yet exist there. Many Calgarians did not own cars and had to be picked up or dropped off when going on trips. The fitness craze did not exist, nor did television to any great extent. Much of young peoples' entertainment was self-generated. It was in this environment that a group of friends got together to form an outdoor club.

John Hickey (MacInnes) founded the Rocky Mountain Ramblers Association on March 2, 1954. It was affiliated with the Ramblers Association of Great Britain and the Canadian Youth Hostel Association. The RMRA was to stimulate an interest in backpacking and in holiday tours with a dynamic outing program. The club was unofficially known as "Hickey's Hikers" in those early days. Meetings to plan trips were held in John Hickey's bedroom in his parent's house. In 1955 annual dues were $1.00.

The first RMRA trip was to Mt. Yamnuska on May 9, 1954. About thirty went on that trip, with a small group led by John Hickey making the peak. The majority of the members split into small groups and wandered around on the east ridge. To commemorate this historic outing, the Ramblers repeated the trip during the fortieth anniversary celebrations in 1994. This time all participants made the peak.

The first camping trip was on the Victoria Day weekend of 1954. Ticks, mud, cold weather and loud neighbors made for the memorable "Kananaskis Massacre No. 1". This trip was thankfully not repeated in 1994. The first holiday tour was a one-week backpack into Assiniboine led by John Hickey.

Outdoor Activities

The focus of the Ramblers has always been outdoor activities. The first 27 years saw a great variety of pursuits undertaken by the club. Backpacking and holiday tours were especially popular. The following are some highlights mentioned in the History to give you some idea of the diversity of trips. Purchase a copy of the History and read the details of these activities. Perhaps in the future some of these adventures can be repeated.

Backpacking

Backpacking was a popular activity, much more so than today. The RMRA had club equipment for rent including sleeping bags and hand made tents. The following are just some of the outstanding trips taken:

- In 1958 a 50 mile backpack from Castle Junction to Mt. Assiniboine via Shadow Lake, Simpson Pass and Sunshine Village completed by Tom Moffat, Ken Bailie and Fred Marsh.
- In 1959 an epic bushwhack from Moraine Lake to Marble Canyon via Wenkchemna Pass and Tokumm Creek.
- The North Boundary Trail of Jasper National Park from Berg Lake in 1968
- 1969 week long trip to Pipestone Pass, Siffleur River and Clearwater Pass led by Jack Carter.
- In 1970 Jack Carter led a 9 day backpack into the Brazeau - Poboktan Pass area of Jasper Park.
- 9 day trip to Glacier Park, Montana, led by Brian Crummy in 1972. (much bushwhacking)
- 9 day backpack from Kananaskis Lakes to Bourgeau parking lot via Palliser Pass, Wonder Pass, Citadel Pass and Healy Pass! Led by Bill Leach in 1972.
- Wally Drew led 16 members to Copperstain Mtn on the east edge of Glacier National Park in 1973.
- Quita Mills led a 7-day trip from Sunshine to Assiniboine and out Bryant Creek in 1973
- Brian Crummy led a 9 day backpack into Jasper Park along the Skyline Trail, then the Nigel Pass - Jonas Pass - Poboktan Pass area in 1973.
- In 1974 Helga Dauer led the first of many ski backpacks into Egypt Lake.
- Wilf Twelker built igloos on his trip to Balfour Glacier in 1974.
- 10 Ramblers skied the full traverse from Temple Lodge to Baker Lake and out Baker Creek, staying the night in an igloo.(1974)
- Jack Carter led a trip to Elysium Pass in northern Jasper Park, a seldom seen wilderness area. (1974)
- 1974 trip to the Bugaboos where East Post Spire was climbed. (Daphne Smith, Arn Haase, Peter McGill leading)
- 1978 trip to the Pacific Crest Trail in the North Cascades of Washington led by the Flanagans.
- 1979 trip to Caldron Lake, climbing Mistaya Mtn, led by Art Davis.
- 1979 backpack to Whiteman Pass - Owl Lake area by Peter McGill.

Holiday Tours

Holiday tours involving leisurely backpacks, car camping, or stays at resorts were very popular:

- A week at the Stanley Mitchell hut in Little Yoho Valley with horses packing supplies in and out!
- Thanksgiving weekend by train to Rogers Pass, staying at the ACC Wheeler hut.
- In 1961 the first of many annual Victoria Day weekend trips to Jasper
- 1961 Labor Day weekend trip to Windermere for camping, swimming, golf, and water skiing.
- 1963 Christmas ski week to Apex Alpine, Big White and Silver Star.
- 1964 Christmas ski trip to Todd Mountain, BC.
- The 1966 Victoria Day weekend trip to Jasper led by Alastair Sinclair, the most active trip leader that year.
- 1973 Christmas ski trip to Big White, staying in a lodge on the slopes, led by Wally Drew.
- 1974 car camping to Kokanee, Slocan, and Manning Parks led by Jim Kirkpatrick.
- 1975 car camping to St. Mary's Alpine, Kokanee and Cathedral Parks led by Jim Kirkpatrick.
- 1975 trip to the Valhalla Mountains and Kokanee Park led by Daphne Smith.

- In 1976 Helga Dauer led the first of many annual ski weekends to Sunshine Village.
- In 1978 Mary and Doug Campbell led 21 Ramblers on a weekend at Wapta Lodge
- In 1980 Peter McGill led a 10-day trip to Monashee Provincial Park.
- A 1980 Christmas trip to Delphine Lodge at Wilmer, BC, led by Jim Cunningham.
- 1981 New Year's at the Ramparts Creek Youth Hostel for 20 Ramblers led by the Lowndes.

Day Trips

Day trips became a regular part of Rambler life when Wally Drew joined the club in 1956. The following are a few highlights mentioned in the History:

- Wally's first day hike was to Aylmer Lookout with 12 participants.
- Ramblers climbed Mt. Temple for the first time in Aug, 1963.
- Alastair Sinclair was on the club's first ascent of Mt Aylmer in 1964.
- Roger Woodgate made probably the first ascent of Grotto Mtn by a blind man in 1966
- 1966 saw the first Rambler ascent of Storm Mountain.

Cross-country Skiing

Cross-country skiing was initiated in 1956 with Wally Drew leading the first trip. Downhill skis were used for touring. 'Skinny Skis' did not become popular until the 1970's.

- October 28, 1956 was the Ramblers first ski trip: to Elbow Lake, only a foot of snow but lots of rocks!
- Wally Drew led the first of many Easter Weekend trips into Skoki in 1959.
- The first recorded 'skinny ski' trip led by Alastair Sinclair up Forty Mile Creek in the 1971-1972 winter season.
- Brian Crummy led a circuit of Cascade Mountain (21 miles) in 1975
- 1980 ski ascent of Junction Mtn by 10 Ramblers led by Wally Drew.
- 1980 circuit of Fort Mile Creek - Mystic Pass - Johnston Canyon, led by Wally Drew.

Downhill Skiing

Downhill skiing was very popular in the early years, sometimes being more popular than ski tours. Visits to popular resorts in Alberta, BC, and the US were common.

Canoeing

- Wally Drew led the first canoe trip on the Bow River near Banff in 1958.
- Ed Stacey made a solo trip from Fort Nelson, BC to Inuvik, NWT, via the Liard and Mackenzie Rivers!
- The Lake Louise to Banff canoe trip in 1973 saw some swamped boats!
- Bill Leach led 8 Ramblers on a 55 mile trip down the Red Deer River.

Ice Skating

- Wally Drew led the first ice skating trip in 1957 to Innis Lake southwest of Olds.

Swimming

- Wally Drew led the first swimming trip in August, 1957 to Pine Lake southeast of Red Deer.
- Wally led the first of many annual trips to Gull Lake in 1958.

Horseback Riding

- In Sept, 1966, 11 Ramblers rented horses at the Diamond Cross ranch and rode to Barrier Lake and back, then enjoyed a BBQ supper and dancing. (Dudes led by Roger Woodgate?)

Rock Climbing

- Was originally banned but became a part of Rambler activities in 1961.
- In 1964 the RMRA purchased a club rope and had its first rock climbing school led by Ted de Waal

Ice Climbing

- Brent Davis instigated ice climbing in 1977.
- In 1978 there were two ice climbs by Brent Davis and Ordell Steen.

Mountaineering

- RMRA member Ron Smylie summited Mount Logan, Canada's highest peak, in April 1959 (not a Rambler trip)
- Wilf Twelker started leading his first of many glacier trips to the Wapta Icefields in 1966, building igloos for shelters.
- First ski ascent by Ramblers of Snow Dome in 1966.
- Ramblers Gerry Schlee and Art Borron participated in ACC Centennial climbs in the St.Elias range in 1967. Gerry led a first ascent!
- 1968 ascent of Mt. Rearguard by Brian Crummy, Rob Ashburner and Jamie Mackie.
- In 1976 Bill Leach climbed 200,000 vertical feet (60 vertical km!).
- 1979 ascent of Mt Athabasca by 7 Ramblers, led by Ordell Steen.
- 1980 Bow Lake - Yoho Wapta traverse led by Wilf Twelker building an igloo for shelter.
- 1980 ski backpack to Castleguard Meadows with an ascent of Castleguard Peak, led by Dick Jull.
- 1980 ski ascent of Mt. Columbia, Alberta's highest peak, by Ordell Steen, Bob Farrell, Tony Forster and Arnold Westberg.
- 1980 ascent of Mt. Victoria by Ordell Steen and Wilf Twelker.

Moonlight Trips

- Wally Drew led numerous moonlight hikes, usually to peaks on the eastern edge of the Rockies. The trips would leave town Friday evening for a wiener-marshmallow roast lasting until midnight. The mountain was climbed in moonlight, and the dawn of day observed from the peak.
- Moonlight hayride west of Bragg Creek in 1973.
- 1980 moonlight backpack to Mt. Bourgeau, led by Helga Pattison.

Social Activities

Social activities are an important part of the Ramblers, but this was especially so in the earlier years. Many of the outdoor activities seemed to have a more social bent than today. Society back then placed a strong emphasis towards marriage on young people. Read the History and see how many couples were formed from the Ramblers. One backpack alone to Floe Lake produced 3 marriages within half a year! The term 'holiday tour' conjures up thoughts of relaxation and socialization. Some of the following highlights from the History are still going strong today:

- The first recorded party thrown by Bernie Taylor and Wally Drew was a ski season wind-up in April, 1958.
- Numerous square dance evenings at Ted de Waal's parents house, 1958 and earlier?
- First recorded annual New Years Party Dec 31, 1958 at Tom and Lucia Moffat's.
- First recorded annual Christmas Party held Dec 21, 1960 at Sandy and Nancy Vair's home.
- First of many Halloween parties held in 1961 at the Thurston's.
- Wednesday meetings became wiener roasts at Glenmore Park in the summer of 1963.
- Some Wednesday meetings were spent swimming, skating or skiing at Happy Valley.
- Some other meetings were held playing bingo at the Thurston's, or bowling or square dancing.
- Linda Scarlett organized the first recorded progressive supper from one end of the city to the other in 1972.
- 1973 saw the first recorded treasure hunt using cars, somewhat like an auto rally.
- 1974 saw the first annual Mosquito Creek Thanksgiving weekend car camp.
- First annual car camp to the Highwood in 1979.
- 1980 'fox' hunt organized by Dieter Steffan in the upper Kananaskis.

Community Service

There was more 'esprit de corps' in the club in the early years. A tremendous project for a club of the Ramblers size was the construction of the Centennial Trail over Mt Allan from Ribbon Creek to Deadman's Flats.

- Wally Drew named Chairman of the Centennial Trail Project, 1966.
- Work on the Centennial Trail continued through 1969.
- In the 1970's the club became very active in conservation matters, and submitted numerous briefs, especially concerning National Parks Policy. (Sound familiar?)
- Wilf Twelker led the first recorded river cleanup in 1973.
- In 1975 the RMRA made several submissions on the future of Waterton Park, twinning the Trans Canada Highway in Banff National Park (sound familiar?), creation of the Great Divide Trail, and the creation of Valhalla Park in BC.
- In 1979 the RMRA made submissions on Lake Louise development and the Wilmore Wilderness area.
- In 1980 the Ramblers placed summit registers on top of Mt Bourgeau, Storm Mtn, and Observation Peak for Alberta's 75th birthday celebrations.
- More recently, there has been participation in Friends of Kananaskis' trail maintenance endeavours.

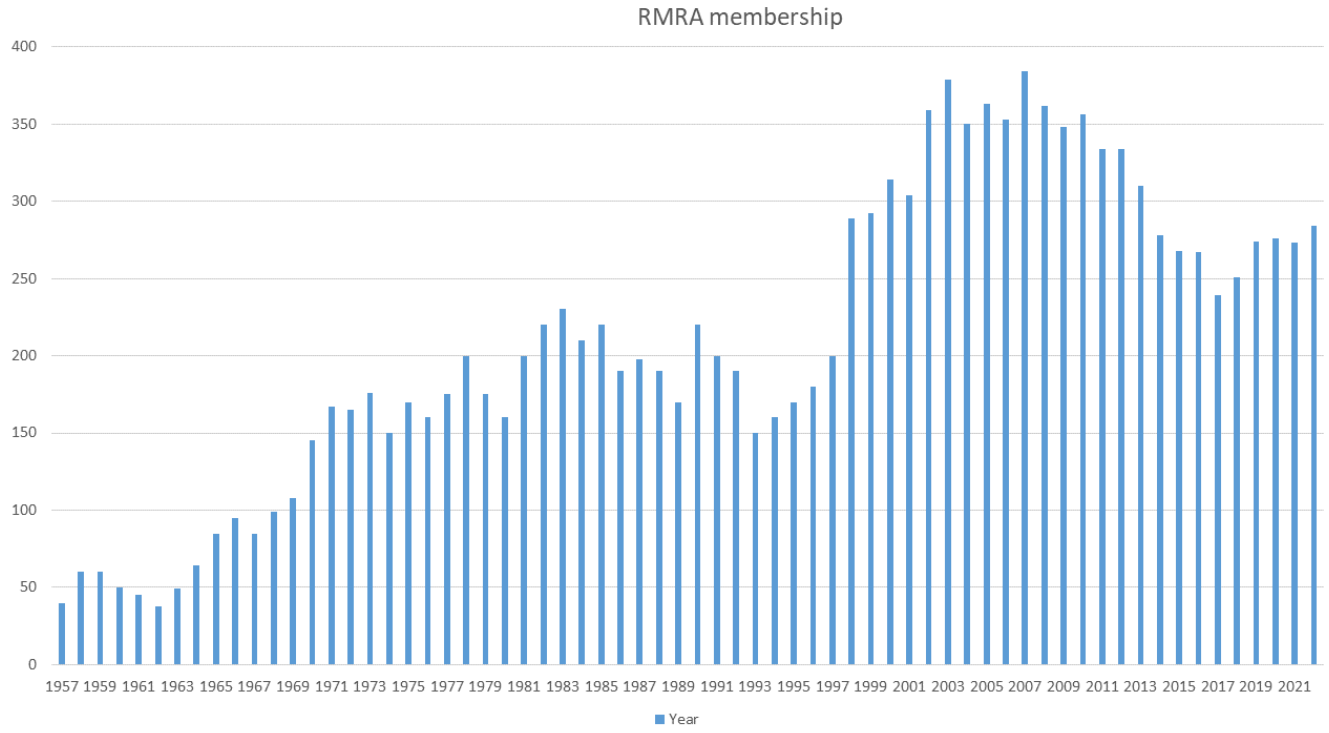
RMRA Organization

The path from informal meetings in John Hickey's bedroom to our structure today is outlined in the History. The early affiliation with the Canadian Youth Hostel Association ended within a year, and the affiliation with the British Ramblers ended in 1964. Some important timelines are:

- The first Annual General Meeting held Sunday morning Dec 5, 1954 at the Club Cafe.
- 1957 saw meetings with programs designed to teach outdoor skills to members. A leader manual was developed.
- May 1957 saw the first permanent RMRA headquarters in Ron Smylie's Alpine Sport Shop.
- The 'Pack Rat' made its first appearance in 1957 due to the efforts of Wally Drew.
- The Leaders Council (Coordinators Council) was formed in 1957.
- The 1957 AGM became a Saturday evening banquet along with business.
- In 1958 a broken leg on a ski trip spurred the requirement for compulsory trip insurance. (10 cents / person / day)
- 1960 saw the club move to Bob Baxter's bookstore.
- First Gold Pin awarded to Wally Drew and the second to Sandy Vair in 1960.
- In 1963 a grievance committee was formed.
- In 1968 Sandy Vair retired from the Executive after 14 years service, 6 as club Chairman.
- In 1969 the bylaws of the Association were rewritten, giving the club an up todate constitution.
- In 1969 the AGM was held at a regular Wednesday meeting, rather than at the Annual Dinner and Dance.
- Frank Stanley joined the Ramblers in 1969 and has run the coffee shop ever since.
- In 1971 the RMRA moved to the basement of the Lutheran Church at 7th Ave and 9th St. SW.

1981 to the Present

The first 27 years from 1954 to 1981 saw the Ramblers develop from an idea into a mature club with a proud history. Since 1981 the Association has remained basically the same in structure and total membership has grown since 1997 as Calgary's growth has accelerated (see chart below). During those intervening years there were some great adventures, epic trips and worthy achievements. Some members who participated in those years have great stories to tell, and it would be a shame to not document them. A challenging but rewarding project would be the updating of our history to the present before it is too late. Who among us is up to that challenge?



CHAPTER 2: BENEFITS OF MEMBERSHIP

Membership

Types of Membership

Note: Rambler trips are open to members only, and their children.

To apply for membership you need to be at least 18 years old. Before becoming a member, you must read the Outdoor Activities Guide, and complete and sign the Membership Application form, which includes a liability waiver. There are three types of membership: Regular, Lifetime, and Guest:

- **Regular Membership:** For a modest annual fee you will have the opportunity to participate in one of the most active hiking and skiing clubs in Calgary. The Ramblers offer many easy introductory trips for members new to the outdoors. These easier trips are especially numerous at the start of the hiking and skiing seasons. The Ramblers also offer more advanced trips for those with more experience and/or desire to expand their current range of endeavors. The annual membership term ends November 30th. Memberships purchased after September 1st are valid until November 30th of the following year.

- **Lifetime Membership:** Same privileges as Regular Membership. No longer available for purchase.

- **Guest Membership:** Regular members can sponsor a guest (or guests) on an outdoor day trip activity. Any guest may go on up to 3 club outdoor day trips in a membership year. The sponsor is responsible for ensuring the Guest Procedure linked to on the Member Info website page is followed; it includes that the guest read and sign the RMRA Guest Application and Waiver.

Participation of Minor Children

Members who wish to bring children less than 18 years of age on trips must have a parent or legal guardian sign the Release and Waiver of Liability for Minor Children. A Responsible member who takes sole responsibility for the needs and safety of the child must accompany each child.

Applying for Membership

Regular and Guest Members

The procedure for applying for membership is basically the same for both Regular and Guest members. The application was designed to be thorough, with the hope that it helps prepare members for outdoor activities as well as reducing the risk of any physical or financial harm. There are two documents that need to be read: the Outdoor Activities Guide, and the Membership Application form. Applicants can read these documents on the website. The Membership Application may be filled out online to create a pdf document which may be signed electronically and submitted via email, or the pdf may be printed and sent. Copies of these documents are also available at regular meetings, but applicants will need to take them home to read and complete. This gives them the opportunity to consult legal advice about the waiver, if they so choose.

Outdoor Activities Guide

Club members wrote the Guide in plain and simple language. Many applicants are new to the outdoors, and we wish to prepare them by describing in detail our activities, and the risks and hazards associated with the activities. We also want applicants to be knowledgeable of our Risk Management policies, our trip rating system, and the responsibilities of participants and coordinators. Being knowledgeable of these topics is important for you, and for the rest of the membership.

Membership Application Form

The form has an Applicant's Information section, a Member's Agreement section, and a liability waiver section. The Member's Agreement has terms of membership that the club expects from its members. The liability waiver section was written with legal advice, and is more formal in nature.

Outdoor Activities

The Ramblers is an active club with over 350 trips per year. There is no seasonal schedule. All trips are posted on the website calendar, often only a day or two in advance. Multi-day trips are often announced at least a week ahead of time. This system allows Coordinators to choose trips that take advantage of local conditions and upcoming weather.

There is usually a good selection of trips to choose from each week. Trips are informal in nature in that all participants are responsible for their own safety. A volunteer Coordinator arranges for a trip to take place, but does not act as a guide.

Participation is usually by advance registration online. Please arrive 10 minutes before the stated time of departure in order to arrange carpools. Participants often carpool to the trailhead, with each passenger expected to compensate the driver for expenses at an RMRA suggested cents per kilometer rate.

See the **Outdoor Activities Guide** for a detailed description of our activities, associated risks and hazards, our trip rating system, our Risk Management policies, and participant's responsibilities. The club has a **Trips List** available to members at meetings with over 2000 pre-rated trips. This list is also available for searches on the Members' area of the website.

Coordinators have the right to refuse a participant for any reason. Being unprepared with inadequate clothing or equipment is one reason. If you are unsure of your ability or what clothing and equipment to bring, contact the Coordinator prior to the trip day.

Who Can Go On Club Trips?

Trips are open to all members subject to their ability, their preparedness, or on limits placed on the number of participants. Participants sign up for trips on a first come, first served basis. If you sign up for a trip you are expected to attend; otherwise notify the Coordinator if you cannot go as planned. You can find out about upcoming trips by visiting the Members' area of our website. **You must be a valid member (Regular, Lifetime, or Guest) in order to participate on trips.**

Regular Members

New members are encouraged to start out on easier trips in order to get to know our trip rating system.

Guest Members

Guest members must be accompanied by their Sponsor member while participating on trips. Sponsors are required to advise Coordinators them ahead of time if they intend to bring Guest members by using the online Guest Procedure.

Children

The Ramblers offer some trips that are suitable for children. Many members are parents or grandparents themselves, and enjoy the enthusiasm and sense of adventure kids bring with them. In order for children to participate in trips, a parent or legal guardian must sign a Release and Waiver of Liability for Minor Children, and assign members (often the parents) who will act as Responsible members for their children. Responsible members are solely responsible for the child's needs, welfare, and safety while participating on club trips. The following are some regulations regarding participating children:

- there will be at least one Responsible member on a one for one basis for each child on a trip;
- the Responsible member should only take a child on trips that are well within the capabilities of both the child and the Responsible member;
- the Responsible member will stay with the child at all times during the activity, including transportation to and from the trailhead;
- the Responsible member must notify the Coordinator well before the day of the trip to ask whether children may participate.

Social Events

Aside from the fact that outdoor activities as discussed above are also social activities, the RMRA provides a number of opportunities to participate in less energetic but no less entertaining functions. The Social Director with the Social Committee and enthusiastic volunteers organize several annual events:

Potluck Dinners

Ramblers enjoy their food! Potluck dinners have always been very successful. The idea is to contribute one dish that serves about six helpings. There is no planning, yet the variety is always tremendous. Potlucks can be held anytime, but Christmas and Valentines are popular. Don't miss these opportunities for a great meal and fun.

Stampede Breakfast

Usually held outside at a community hall, this is an annual event held on a Saturday during Stampede. Not to be missed!

Hike and Barbeque potluck

This is held some years, usually in midsummer. A number of hikes are posted in a specific area and afterwards a potluck barbeque is held at a nearby facility. Ramblers supply a main dish and members bring potluck salads and desserts to complete the meal.

[potluck after Open House Field Day at Sibbald Lake, May/99]

Other Benefits

Member Communications

The club newsletter the 'Packrat' was a paper newsletter published until 2011. Copies are on the website if you would like to get a flavour for activities in 'the good old days'.

Current communications are through discussion forums on the website or e-mail notifications.

Annual General Meeting

The AGM takes place on a Wednesday evening in October soon after the fiscal year end (September 30). The Treasurer submits the year-end financial statements, Executive members give reports and the President gives the annual report. New business and the election of the Executive Committee are conducted according to the bylaws. The club needs your attendance at this very important meeting!

Wednesday Evening Programs

From time to time the Programs Director coordinates events to follow the regular meetings. Slide shows of trips by members are popular. Occasionally an outside speaker is invited to show slides or to speak on a topical subject.

Courses

Educational and Risk Management courses, such as First Aid, Avalanche Awareness, Map and Compass, etc., are offered from time to time to the membership. All members should take advantage of these courses whether for the first time or as a review. The often used phrase "participants are responsible for their own safety" rings somewhat false if participants *do not* know how to be responsible for themselves. The Executive often allocates funds to subsidize members for taking courses, especially Coordinators, who are sometimes given priority.

Kananaskis Country Trail Maintenance

The Ramblers, in conjunction with other outdoor clubs and individuals, help park staff to maintain the trail system in this popular Foothills area west of Calgary. Work parties are organized, usually once a month from May to September, to clear trails of overhanging brush, or to construct simple water management controls. The work is not too heavy, and you get an appreciation into what it takes to keep our trails in good condition.

Website

The RMRA maintains a website at www.ramblers.ab.ca which has two major sections: the Public area, and the Members' area.

Public area

Much of the Rambler website is open to the public. We feel our club has a lot to offer, and we want to give the public the opportunity to know us. Here you can:

- find out about our recent trips;
- view Calendar activities open to the public;
- browse our reference material on outdoor activities and topics.

Members' area

This secure area of the website is available to Regular members only. Here members can:

- read the Calendar of Events which lists upcoming trips, meetings, social events, programs, and courses;
- register for trips and set up preferences to receive email notifications when trips are posted;
- join in our Discussion Forums;
- conduct searches on our database of trips.
- read historical issues of our newsletter The Packrat;

Regular Members

When your membership application is accepted you will be supplied a username and a password to gain access to the Members' area. We urge you to keep your username and password confidential. In the Members' area you will have the ability to change your personal information, including your password.

Privacy Preferences

Occasionally, members' names may appear on the Public area of the website. Members have a choice as to how their name would appear: either their full name, or their first name only. Trip reports only show first names in the Public area. Members' contact information (address, phone numbers, etc.) never appears on the Public area without their express consent. Members may also restrict contact information from being made available to other members. At any time, individuals can change their privacy preferences online.

CHAPTER 3: COMMITTEES

There are three permanent committees in the Association. All committee members are volunteers who put time and effort into making the Ramblers a worthwhile club for all. If you have been with the club for a few years and have derived enjoyment from its activities, why not consider giving something back by volunteering for one of these committees? Some positions require more commitment than others, but there are still many things that can be done to help the club with only a minimum of effort. The next time a position is open or a job needs to be done, volunteer; who knows what latent talents you may have!

- ***Executive Committee:*** manages the business of the Association.
- ***Coordinators Council:*** responsible for the outdoor activities of the Association.
- ***Risk Management Committee:*** promotes risk management awareness within the Association.

Executive Committee

The Executive Committee is responsible for the ongoing affairs of running the Association. It has the final decision on any directives suggested by the Coordinators Council, the Risk Management Committee and various sub committees. One of its most important responsibilities is keeping the club in a sound financial position. The Executive meets when necessary, but no less than four times a year. At each meeting members of the Executive report on issues concerning their positions and any sub committees. Minutes of each meeting are taken, with summaries posted on a website discussion forum.

The positions on the Executive Committee are: President, Vice President, Past President, Secretary, Treasurer, Trips Director, Social Director, Programs Director, Website and Communications Director, Membership Director and Marketing Director. All positions are for one year and all, except for Past President and Trips Director, are elected at the Annual General Meeting. The following summarizes the responsibilities of each position.

President

The President serves as the chief executive officer of the RMRA. Duties include:

- call and chair meetings of the Executive, and of the Association;
- serve as an ex-officio member of all committees of the Association;
- delegate the duties of the President to the Vice President when unable to be present at a meeting;
- approve with the Vice-President subsidies to members to attend courses;
- appoint a member of the executive to represent the Association at outside organizations such as CAOC and CASC; and
- represent the Association to the media.

Vice President

The Vice President acts for the President when the President is unable to attend meetings. In the event that the office of the President is vacant, the Vice President shall assume all the duties of the President for the balance of the elected term of the President. Other duties of the Vice President are:

- be responsible for finding information on and announcing courses;
- approve subsidies of courses with the President;
- act as an information officer to maintain and update documents as necessary;
- see that copies of documents are in plentiful supply (e.g. trip sheets, brochures, etc.); and
- call and chair meetings of the Risk Management Committee;

Past President

The Past President lends continuity and experience from the previous Executive.

Secretary

The Secretary keeps the minutes of the Club. Duties include:

- be responsible for the minutes of all meetings of the Executive, the Coordinators Council, and the AGM;
- maintain all minutes in a Minute Book which shall be the property of and the official document of the Association, and post summaries on the website discussion forum;
- have copies of the minutes available for members;
- be responsible for all correspondence of the Association;
- collect and distribute all mail received by the Association;
- send letters of thanks on behalf of the Club to outside speakers;
- file annual documents as required by the Societies Act of Alberta; and
- maintain custody of the Association Seal.

Treasurer

The Treasurer is the financial officer of the Association. Duties include:

- maintain the Association bank accounts;
- maintain the ledger of the Association;
- have the financial records audited at year end and presented to the AGM; and
- collect all annual membership dues and other fees approved by the Executive.

Trips Director

The Trips Director represents the Coordinators Council on the Executive. Duties include:

- call a Coordinators Council meeting at least once a year;
- prepare a summary of trip statistics to the AGM; and
- advise probationary coordinators of trip procedures and website processes they can use,
- update trip database entries with safety notes
- serve on the Risk Management Committee and discuss any trip incident or injury with the Committee Chair to determine if a Committee review is required;

Social Director

The Social Director organizes social functions for the Association. Duties include:

- organize social functions such as:
    - Christmas and Valentines potluck dinners;
    - Stampede breakfast;
- organize a sub-committee to assist in planning and coordinating social functions; and
- see that the coffee shop supplies are in good order.

Programs Director

The Programs Director arranges Wednesday meeting programs. Duties include:

- arrange Wednesday meeting programs at least once a month;
- provide a mix of outside speakers, members' slide presentations, and instructional programs; and
- liaise with the Risk Management Committee when Risk Management related programs may be appropriate.

Website and Communications Director

Duties include:

- act as the main Executive contact with the Webmaster
- undertake simple website amendments to assist Webmaster
- participate as a member of the ad hoc website committee
- responsible for Rambler electronic devices, e.g. Projector, laptop, etc.
- act as a clearinghouse for general email communications (i.e. info@ramblers.ab.ca) and respond to general inquiries
- monitor other Rambler email files to eliminate obsolete communications so that data capacity restrictions are not exceeded

Membership Director

The Membership Director maintains the membership roster. Duties include:

- receive electronic and paper submissions of membership application forms and update the online membership database
- arrange for a membership representative to be present at Wednesday meetings to distribute and accept Membership Application documents;
- check applications for correctness, receive membership fees for forwarding to the Treasurer.
- receive electronic copies of Guest waivers and undertake storage of any paper copies.

Marketing Director

- The Marketing Director undertakes promotional activities to attract new members.

Coordinators Council

The Coordinators Council deals with matters relating to outdoor activities. The Council consists of all Coordinators and the officers of the Association: President, Vice President, Secretary, and Treasurer. The Trips Director is elected to chair the Council and to be their representative on the Executive. The Council generally meets twice a year in the spring (April) and fall (September). Some functions of the Council include:

- consider conflicts or concerns arising from trips;
- be responsible for trip ratings;
- consider recommendations from the Risk Management Committee, including Risk Management policies;
- nominate and approve applications for Probationary Coordinators;
- approve Probationary Coordinators to Full Coordinators;
- recommend Coordinators for special recognition or awards;
- discuss any issues of concern to Coordinators.

Risk Management Committee

Committee Agenda

- **Education**: Knowledge is the key to maintaining a high level of risk management awareness on club trips. The Committee promotes outside courses relevant to RMRA activities, conducts Wednesday evening programs and forums, and suggests field trips to practice Risk Management techniques.

- **Documentation:** The Committee will endeavor to make sure that Risk Management documentation is up to date and readily available to club members.

- **Risk Management Proposals:** Proposals are formulated as necessary for consideration by the Coordinators Council.

- **Incidents:** Coordinates the reporting of any incidents that occur, including anything that may be learned from the incident.

Committee Members

Executive Committee members on the Risk Management Committee:

- **Vice President:** The Vice President is the chair of the Risk Management Committee.

- **Trips Director:** The Coordinators Council considers recommendations of the Risk Management Committee.

- **President:** The President is on all committees.

In addition there are up to eight club members who hopefully represent a cross section of the Association to give a balanced perspective to the Committee. The Risk Management Committee meets from time to time as it feels necessary to make plans to execute its agenda.

CHAPTER 4: GOALS, BYLAWS, AND RULES

Goals

- To foster the safe undertaking of non-motorized outdoor activities by Association members.
- To protect the interests of Ramblers and to maintain their rights & privileges.
- To foster greater love and knowledge of the countryside by members.
- To assist in the preservation of countryside amenities.
- To function as a bureau of information for members.
- To organize social functions for the members.

Bylaws

Link to the Bylaws

1. COORDINATORS COUNCIL

The Coordinators Council shall be generally responsible for the outdoor activities of the Association and shall be responsible to the Executive Committee. The Coordinators Council shall consist of the officers and the Coordinators. Coordinators and Probationary Coordinators shall be appointed by a vote of three quarters (3/4) approval of the members present at a meeting. Prior to nomination as a Coordinator, a person must have been a Probationary Coordinator for a period of a year. Coordinators and Probationary Coordinators may resign by giving notice to the Chairman of the Coordinators Council (the "Trips Director"). The Executive Committee may remove inactive or incompetent Coordinators or Probationary Coordinators from their positions on the recommendation of the Coordinators Council. Meetings shall be called by the Trips Director and shall require five clear days notice being given verbally or in writing to members of the Coordinators Council. Meetings shall be called at least once yearly.

Quorum shall be one fifth (1/5) of the coordinators who have taken out trips in the past fiscal year. Business shall be transacted upon majority vote of the members present and voting, and shall be subject to approval by the Executive Committee.

The Coordinators Council shall appoint a Secretary who shall take the minutes of the meetings of the Council, and shall forward a copy of the minutes to the Secretary of the Association.

The Coordinators' Council shall organize Association trips in a manner that is consistent with the following guidelines:

(a) Coordinators and Probationary Coordinators may lead Association trips, subject to the direction of the Coordinators Council.

(b) Each person on a trip participates at his or her own risk and is responsible for his or her own safety and well being, and no liability rests upon the Association or any Coordinator or any person due to any negligence.

(c) An Association trip must be announced to the members of the Association in a generally accepted manner.

(d) All Association trips require a trip sign-up sheet that shall be signed by all participants.

In the event of prolonged absence of the Trips Director, either the Trips Director or the Coordinators Council shall appoint an acting Trips Director who shall assume all duties of the Trips Director during the absence of the Trips Director. In the event of the resignation of the Trips Director, the Coordinators Council shall appoint a successor for the duration of the term of office.

2. FORMULA FOR POLITICAL ACTION

When a matter arises which is relevant to the activities of the Club that in view of a member or members requires an official stand by the Club to forward it or thwart it, then the following procedure shall be followed:

(a) A statement or brief, signed by at least seven (7) members shall be presented to the President.

(b) This statement or brief, shall be posted on the website showing date of posting, and shall be read out, either in whole or in summary, at the weekly meeting on three successive weeks.

(c) An attempt shall be made to e-mail all members who have provided an e-mail address to inform them of the general nature of the proposal, and the date on which a vote will be taken. Such date shall be placed on the website Calendar three weeks prior to the vote, along with links to the statement or brief, to inform members who have not provided e-mail addresses.

(d) At the third meeting the proposal shall be discussed and voted upon. Minutes shall be taken. Two-thirds (2/3) majority would apply and the resulting decision shall be Club policy.

(e) When a matter arises which requires a response to be made in a time period less than that set out in sub-sections (a) to (d) above, then:

(i) One or more members may call a committee of interested members to prepare a brief, proposal, letter or other submission.

(ii) The submission shall be presented to the membership at the first possible opportunity before the deadline for submissions.

(iii) The submission shall be discussed and voted upon. A two-thirds (2/3) majority of those present and voting makes the submission an official position of the Rocky Mountain Ramblers Association.

3. LARGE FISCAL EXPENDITURES

If the Executive Committee wishes to spend a sum of money which exceeds twenty percent (20%) of the membership income of the last fiscal year for a capital expenditure, the Executive Committee must secure a majority approval from the membership present at any meeting of the Club after having given at least two weeks written or verbal notice to each member of such expenditure, and also notice of meeting when the vote of approval will be requested.

4. MEMBERSHIP CATEGORIES

(a) Single membership for any individual over 18 years of age.

(b) Individuals joining after September 1st who have never been members of the Association will pay the standard membership fee to become a RMRA member, and their membership will carry them through to the end of the following membership year.

(c) Present life member of the organization.

(d) An honorary membership, valid for the current fiscal year, or an honoraria life membership, valid for the life of the member, may be granted to any person upon recommendation by the Executive Committee and ratification by majority vote of the members present and voting at a general meeting.

5. RULES OF ORDER

Bourinot's Rules of Order apply at general meetings, except that a motion to commit or recommit is in order.

6. EXECUTIVE COMMITTEE ELECTIONS AND APPOINTMENTS

- A returning officer and two tellers shall be appointed by the members at the Annual General Meeting.
- All results of the election shall be announced to the meeting through the presiding officer.
- The Executive Committee may appoint a nominating sub-committee before the Annual General Meeting to accept nominations for the positions on the Executive Committee.
- One member of the Executive Committee shall be the Trips Director and he / she shall be appointed by the Coordinators Council after each Annual General Meeting. The Coordinators Council may appoint to this position either members or non-members of the Executive Committee elected at the Annual General Meeting.
- The Past President shall be a member of the Executive Committee.

CHAPTER 5: OUTDOOR TOPICS

The material in this chapter comes from several sources: from the Coordinators Manual, from outside publications, from experienced Rambler members, and from open forums held at weekly meetings. Topics included here may be subjects for further forums in the future. This chapter will be added to and reviewed on a continuing basis. The following topics are contained herein:

- **Lightning**
- **Scrambling**
- **UV and You: Protecting Your Eyes**
- **Group Gear**
- **Cold Injuries**
- **Ticks**
- **Bicycling Equipment**
- **Bears, and Other Large Animals**
- **Map and Compass Reading**
- **Leave No Trace**

Lightning

Source: A Wednesday evening Forum held by Wally Drew, 1995, and updated June 1999

Know About Mountain Weather

Highest risk areas:

- foothills and east side of the Rockies, especially to the north.

Highest risk times:

- midday and afternoon in the Rockies.
- afternoon in the foothills.
- late afternoon and evening on the prairies.

Lightning season:

- early May to mid September with July peak.

Storm direction:

- in the Rockies generally from the west, southwest or south.
- east of the Rockies the same, but also from the north and northwest.

Get Forecast Information

Calgary area forecast includes the foothills and the east slopes of the mountains but is site specific to the Calgary airport. Banff (mountain park) forecast is site specific for the town of Banff. We do not get forecasts for Yoho, Kootenay or Waterton Parks.

Keep Eyes and Ears Open

Early indications of lightning:

- Vertical cloud build-ups, especially when rapid.
- Very dark clouds approaching, sometimes green-black.
- Turbulence in clouds.
- Thunder: 3 seconds per km or 5 seconds per mile. (Distance can be vertical, horizontal, or a combination).

Imminent indications for a lightning strike:

- Lightning and thunder nearby.
- Gusts of cold wind.
- Large rain drops, hail, snow flakes or graupel.
- Mammary appearance on the bottom of the cloud.
- Humming, buzzing, tingling, hair standing on end.
- Gun shot thunder sound.

Dangerous Locations

- Tops of peaks and ridges especially above timberline - have an escape route.
- Beneath or beside a lone tree, a taller tree, or on the edge of a taller forest.
- Shallow caves or scoops in cliffs, in ditches, water or on a rope.
- Wooden huts or shelters in the open. Open structures aren't considered low risk.

Lightning doesn't always strike the highest object nearby. On average lightning will hit again 10-13 km from the last strike. The streak has an irregular path and selects a point to strike in the last 30m or so. The most severe part of a thunderstorm is along the fringes. Lightning can strike up to 16 km from the rain/hail shaft and can reach out from the anvil to strike beneath clear sky: the proverbial bolt from the blue. Lightning can penetrate up to 5m into the ground.

30/30 RULE:

When flash to bang count is down to 30 seconds (= 10 km) you should be in a low risk place and shouldn't leave it until 30 minutes after the last thunder is heard. The wait seems a little extreme to me but you should wait at least 30 minutes after the last nearby lightning strike. Thunder is always caused by lightning.

If You Are Caught

- Get off high points if you have time, the lower the better.
- Get into forest of uniform height, or into a metal structure (vehicle too), if time.
- Closed cars & buildings are safe but don't touch sides of the car or get close to electrical wiring, plumbing or metal stoves & chimneys.
- Do not touch trees, walls, or sides of deeper caves.
- Chuck large metal objects, unrope, separate.
- Try to keep dry.
- Remember: ground currents are dangerous 10's of meters from the strike.
- Squat (or kneel) down with feet (and knees) together with nothing else touching the ground.
- When crouching cover ears with hands and tuck head down.
- Do this on the ground or a well conducting metallic base such as a bicycle.
- Sit on your pack (if dry, and greater than 10 cm or 4" thick) with feet together.

First Aid

- Treat for possible breathing problems, shock and or burns.
- Heart may stop and restart, breathing may cease: CPR can be successful
- There is no danger in touching the casualty.
- There may be after effects, some permanent.
- Being hit by lightning side flash is fatal 20% of the time and ground currents 3% of the time.

Above all take the threat of lighting very seriously. It presents the most dangerous hazard we are likely to encounter on our summer trips. Don't be too proud to abort a trip even if only a few minutes from your goal.

Scrambling

Source: summarized by Bob St.John

"Scrambling", when used in conjunction with hiking, usually refers to off trail travel over exceedingly rough ground such as boulder fields, or non-technical climbing where the use of hands is required.

Clothing and Equipment

- **Protective Clothing:** Minor falls and scrapes are to be expected while scrambling. Wear long pants and shirts or tops with long sleeves. Scramble objectives are often ridge tops or mountain summits where weather can change quickly; therefore bring protective outer layers (wind and/or rain shells), and warm insulating layers (sweaters, gloves, hats or toques). A pair of old gloves can protect hands while negotiating rough rock. A wide brimmed hat offers protection from the sun, especially above treeline.
- **Footwear:** Wear sturdy boots with a good tread, as scrambling often involves travel over loose rock (scree) where ankles need support. Be prepared for all conditions - waterproof your boots. When travel over snow is expected, bring gaiters. Ankle gaiters keep small rocks out of boots as well. A two sock system (thin inner sock, thick outer sock) wicks moisture away from, and cushions, your feet.
- **Sunglasses and Sunscreen:** Above treeline, glare from rock and snow surfaces, when added to direct sunlight, can quickly burn unprotected skin.
- **Rock Helmet:** A helmet is required on Scrambles of difficulty 7 or higher. Many members bring helmets on all scrambles, and wear them when rockfall is a possibility.
- **Hiking Poles:** Many people use poles for hiking, and scrambling as well. Poles help with balance while ascending and descending scree. Poles with three sections can be easily packed when on steeper terrain where you need your hands free.
- **Ice Axe:** On some scrambles travel on snow slopes is the preferable, and sometimes only, route to follow. An ice axe, when used properly, can prevent a slip, or stop a slide down a snow slope. Glissading down a snow slope can be a fun and fast way to descend. An ice axe can make glissading less risky by offering a method to control the speed of descent.
- **Headlamp:** The time to complete a scramble varies with route conditions, weather, the skills and endurance of participants, and unforeseen delays. While it is not desirable to return after dark, it is often preferable to staying out overnight. It is advisable to bring a light, preferable a headlamp that frees your hands, to negotiate your way back. Once you experience travel in the dark without a light, you will carry one from then on!
- **Personal First Aid Kit:** Carry a small first aid kit for yourself, and others. You should expect a minor scrape or two, therefore have a supply of various sized Band-Aids. Blisters are another common injury, especially when wearing new boots, or on early season scrambles when your feet are not in shape. Include small scissors, moleskin, some Vaseline, 'second skin', and tape. (Take a first aid course to care for these minor, but common injuries)
- **Extra Food and Water:** Delays may keep you out longer than expected. This is generally when you are tired, and some extra food and water can revitalize you. Keep some non-perishable high energy food in your pack at all times. Natural water sources may not be available, so bring extra.
- **Emergency Supplies:** Everyone should bring an emergency shelter (two large orange garbage bags can keep you dry and out of the wind), a whistle and a light for signalling, toilet paper, fire starters, and water tablets. These items are lightweight, inexpensive, and take up very little space in your pack. They can make an unplanned overnight more comfortable, and could save your life.

Lower Risk Scrambling Practices

- **Scrambling can be DANGEROUS and you could be KILLED:** Scramble routes are usually prone to rockfall. Climbing is commonly done without the use of ropes or other protective climbing equipment. It is always possible to mistakenly go off route and venture onto more serious terrain. Start off on easy scrambles to develop your skills and knowledge. Observe and learn from others. Indoor climbing walls offer a safe environment to learn basic climbing techniques. Scrambling can be fun and rewarding, but there are serious risks involved. Be aware of this at all times; do not become complacent.
- **Wear Your Helmet:** It is good practice to bring a helmet on all scrambles, not just those of difficulty 7. Wear your helmet if there is any possibility of rockfall from above, either from people or from natural causes (wind, erosion, water melt, animals). Even on tame looking scree slopes helmets can protect your head if you should fall. Consider also how all that loose rock got there in the first place (it fell or rolled there). Certainly wear a helmet when near rock bands and cliffs. A small pebble blown off the cliff by wind can kill you.
- **Scree Slopes:** People tend to dislodge rocks while descending scree slopes. Try not to be directly below anyone else, and avoid being directly above others. Stop often to check where everyone is on the slope. Stay within sight and hearing distance of other participants. Regroup if the slope is a long one. Often there is one "great" section of loose pebbles to descend, and everyone wants to use it. Either go one at a time, or go side by side, or stay very close together if it is narrow. Staying close avoids displaced rocks from gaining too much speed if they should hit the person in front. The same principles apply to ascending scree slopes if they are steep. Many people find hiking poles help with balance while negotiating these slopes.
- **Gullies:** Gullies are natural highways for falling rock. Avoid them if you can, but often they are the only feasible way through rock bands. Move steadily through them; do not stop if possible. Move together closely as a group to avoid dislodged rocks. If the gully is steep and narrow, move one or two at a time. Plan to move through gullies with ice and snow early in the day when embedded rocks are still solidly in place. Moving through gullies with running water is dangerous due to water-induced rockfall.
- **Rock Bands:** Avoid climbing rock bands if you can. Generally there is an easier way if you look. If you feel you must climb up a rock band make sure you can climb back down it. Do not attempt to climb a rock band unless you are sure you can retreat if you have to.
- **Cliffs:** If you are traversing below a cliff it is generally best to stay as close to the base as possible. Falling rocks tend to bounce out and land on slopes away from the cliff base. Wear your helmet.
- **Cornices:** Cornices are snow accumulations that grow at the top of cliffs or steep slopes. They can break off without warning, and are especially dangerous in the spring and early summer. Avoid travel beneath them, or stay well away from the base of the cliff or slope. When traversing ridges with cornices stay well back from the edge, on solid rock if possible. Warn others who may be forgetful of this danger!
- **Moving on Loose Rock:** Be careful how you move; use finesse. Take pride in not dislodging rocks; make a game of it. Develop an eye for where to place your feet with minimal risk. Always consider the consequences of what rocks you dislodge could have on others below.
- **Lichen Covered Rocks:** Lichen covered rocks, when wet, are extremely slippery. Avoid them if at all possible.
- **Boulders:** Large boulders on steep slopes can be unstable. The consequences of a boulder rolling on you are obviously serious. Avoid them on steep slopes, or on low angle slopes if they seem unstable. Often lichen and other vegetation indicates a stable boulder slope.
- **Moraines:** Glacial moraines are a type of unstable slope to avoid. They are often steep sided, subject to rapid erosion, and prone to rockfall. Travel along the crest of moraines however can be pleasant and relatively low risk, especially if animals have worn a path there.
- **Slabs:** Ascending low angle slabs can be much faster than going up scree. You will generally need boots with tread that provide good grip (Vibram is one type). Move with your boots flat to the slab (smearing) to maximize the tread surface gripping the rock. Stand vertically over your feet to maximize the downward pressure on the boot tread. Beware of and avoid sections with loose pebbles. The same principles apply to descending slabs. Often it is easier to traverse down slabs to keep your boots smearing the rock.

- **Yell "ROCK":** If you see a rock falling in the vicinity if others, yell "ROCK" loudly. If you hear someone else yell "ROCK", take cover. Instinctively you may turn around and look up, or cover your head with your hands. This may result in a rock in your face, or a broken hand. Instead try to hear where the rock is coming from, and move accordingly. If you are in a gully, try to move up one side. If you are near a cliff, move as close to the base as possible.
- **Lightning:** Scramble destinations are often mountain tops or high ridges. Be observant of changing weather conditions, and look for escape routes as you climb. Lightning is the main threat while above treeline. Descend quickly before a storm is within striking range.
- **Snow Slopes:** Summer snow that has gone through many freeze-thaw cycles is generally stable. Snow slopes can become unstable:
    - if they face the sun and heat up (mid-morning though late afternoon);
    - if they did not freeze overnight;
    - if it rains; or
    - during and after a heavy snowfall.

  Check for signs of previous slide activity. The least risky time to ascend a suspect snow slope is in the early morning after it has frozen overnight. Avoid snow slopes that have these associated hazards:

    - cornices above the slope: they can break off unpredictably; and
    - cliffs, boulders, constricting gullies, streams, or lakes below the slope: they worsen the consequences should you or the slope slide.

  Choose slopes that have smooth runouts. Use an ice axe to prevent a slip, or to stop a slide if you do slip. Take an official Snow and Ice Course to learn how to properly use an ice axe. Practice your ice axe skills on minimal risk slopes with smooth runouts. Beware that patches of ice may be present beneath the snow surface. Also beware of streams that may be running just under the surface; breaking through into such a stream could result in being carried down under the snow slope.

Scrambling Tips

- **Ascending Scree:** Travel on scree is almost unavoidable in the Rockies. Some scree slopes can be energy-sapping to ascend, while other scree slopes can offer a solid staircase-like route up a slope (well, almost). Avoid loose, pebble scree unless tread-milling is your style. Look for scree made of medium sized rocks that you can step on individually. Often these rocks will stay put while you ascend. Avoid large boulders that could roll on you. You can often tell the stability of scree slopes by their colour. Stable scree is often dark coloured due to the black or dark green lichens that grow on them. Unstable scree is often light tan or light grey coloured due to fresh rock surfaces (dolomite (tan) and limestone (grey) are common rock types in the Rockies). Foot placement can be important. If the scree is loose, treat it like snow, and tamp it down slightly with your foot to make a platform. Look for foot placements in small depressions where the scree may have settled somewhat. If you are not making much progress, stop and look around. Try different coloured or different sized scree. See how others are doing, and move onto routes where they are having more success. Sometimes rock ribs or slabs are present on scree slopes, and offer more solid footing. Note that loose rock and pebbles on outcrops can be treacherous. Often fine dirt in water runoffs provide solid footing. Anywhere you see vegetation there will usually be solid footing, but try not to damage the plants, especially on popular routes. As you gain experience you will develop an eye for the best ascent routes on scree, but be warned, some scree is just plain awful to go up.
- **Descending Scree:** Scree that is the worst to ascend, is often the best to descend. At its best, descents on loose pebble scree is fun and fast. You can make large jumping steps onto scree that gives way and moves with you. Look for light coloured pebble scree that fans out down the slope. Often you can see the lighter coloured tracks of others who went down before. Scree that is best to ascend is often the worst to descend. Each step down may be onto rocks that are relatively solid, or not. This where hiking poles offer balance and support. Lengthen the poles and plant them in front and to the side - you are now essentially walking on all fours. Expect to fall once in a while. Try to fall backwards and let your pack cushion the fall - but watch your head if not wearing a helmet. If you are having a difficult time, look around for other types of scree or rock to descend; observe how others are faring.
- **Ascending Rock Bands:** Climbing rock bands can be fun and rewarding. Before you start plan your route; visualize where you will go and what holds you will use. Be sure you can retreat back down if it gets too hard. Move one point (hand or foot) at a time while the

other three are on holds. Check each hold or placement before committing to it. Thump it with the heel of your hand or kick it with your foot to help determine how solid it is. A good rule is to consider all holds and placements suspect, especially in the Rockies. Many holds and placements are quite secure with downward forces, but not with outward forces. Therefore use holds with downward pressure, and refrain from pulling out on holds. Climb with your legs and feet. Use your arms and hands for balance and stability only, otherwise you will soon tire. Once you have determined that a foot placement is solid, move onto it and position yourself directly over it. It is far better to be directly over one good foot hold than to be indirectly on two tentative holds. Stability is best attained when your posture is vertical, and your weight is directed straight down onto your footholds. Hugging the rock is instinctive with beginners, but places outward forces on footholds, making them less secure. As you climb look around for better routes that could not be seen clearly from below. However do not let a couple of good holds lead you to a dead end; keep the objective in mind.

- **Descending Rock Bands:** Most people find descending rock bands more difficult than ascending, but with practice it becomes easier and more natural. Just as with ascending, plan your route; move one point at a time; check each hand hold and foot placement; climb down with your legs, not arms; and keep your weight directly over your feet, do not hug the rock. Try facing out while down climbing, you will be able to see the route more clearly. If it is too steep for facing out, try sideways, or face the rock if that is more comfortable. It is often best to choose handholds at or below your waist to allow you to easily move down to lower footholds. An experienced participant should down-climb first to coach others as to best footholds, etc. Try to limit down-climbing to an absolute minimum, and then only to routes that you previously ascended and know.
- **Ascending Snow Slopes:** Snow slopes can offer one of the best ways to ascend. The person in front kicking steps for the group should:
    - keep the steps comfortably close together for all participants;
    - make the steps deep enough to provide a secure footing; and
    - angle the steps slightly downward into the slope.

  Each participant should try to improve the steps as they use them. It is more efficient to kick steps straight up a snow slope rather than traverse back and forth. People are generally more comfortable going straight up as well. If the snow is too hard to make good steps, or if you are post-holing in soft snow, then it is best to get off the slope if possible, and choose a rock or scree slope instead.

- **Descending Snow Slopes:** Snow slopes offer one of the fastest ways to descend a mountain. Snow also provides a soft forgiving surface that is very easy on tired feet. Two common methods of descend are kick stepping, and glissading.

  Kick steps with the heel of your boots using a determined, plunging style. This ensures a firm supportive foot plant. Have your ice axe ready if you should step on hard snow or ice. Generally it is best to make your own steps; using someone else's steps often does not provide firm support, or the steps may collapse.

  Glissading, or boot skiing, is fun and fast. You need to have the ice axe skills to control your descent and to stop an uncontrolled slide. Practice on minimal risk slopes.

Rock and general mountaineering courses are available locally - ask club members. Some good books are available, e.g. “Mountaineering: The Freedom of the Hills”.

[on Mt. Victoria, Aug/98]

UV and YOU: Protecting Your Eyes

Source: Article to the Packrat submitted by Ron Moore, 1995

Federal government scientists are predicting near-record thinning of the ozone layer this year, meaning an increased risk of cataracts and other eye problems, skin cancer and other health effects. The amount of UV (or ultraviolet radiation) reaching the earth is expected to be between six and ten percent higher than normal across the country.

Now, more than ever, it is important to take care to:

1. Wear sunglasses that provide the following:
   - proper UV protection (they should block out 99 to 100 % of both UV-A and UV-B);
   - lenses that are large enough to protect your eyes from light and UV;
   - lenses that are free of distortions and perfectly matched in colour;
   - comfortably fitting frames that do not block side vision.

2. Wear sunscreen with an SPF (Sun Protection Factor) of 15 or more, and be sure to reapply it frequently, according to directions.

3. Spend less time in the sun at midday.

4. Wear a hat, long sleeves and long pants along with your sunglasses when you do venture outdoors at midday.

Do not forget to wear your sunglasses on bright, cloudy days as well as sunny ones. Clouds do not block out UV radiation.

Everyone benefits from wearing UV absorbing vision protection. Protection from UV is a must if you fit into any of the following categories:

1. You work outdoors or spend a lot of your leisure time outdoors (particularly between the hours of 10:00 AM and 4:00 PM);

2. You work or play near water, snow or sand. UV is reflected off these surfaces. Even cement reflects UV.

3. You live at high altitudes.

4. You are on medications or using products such as: tranquilizers, diuretics, antihypertensives, artificial sweeteners, N.S.A.I.D.s, oral contraceptives, anti-fungals, sulfa-containing drugs. Check with your optometrist, pharmacist or physician to see if the medication you take causes increased sensitivity to UV;

5. You have fair skin and blue eyes;

6. You have had cataracts removed from your eyes;

7. You use sun lamps or tanning lotions;

8. There is a history of retinal degeneration in your family.

REMEMBER: The first thing to look for in sunglasses is protection from ultraviolet light. The second is protection from glare. Be sure to ask your optometrist for the best type of lens to suit your needs.

The ABC's of UV

UV has no value to vision and is harmful to every part of the eye that absorbs it.

UV, or ultraviolet radiation, is a part of the sun's energy. While the sun sustains all life on earth, some forms of this energy can be harmful to life. It's ultraviolet rays, which cannot be seen by the naked eye, can cause damage to unprotected eyes and skin.

There are three types of UV: UV-A, UV-B, and UV-C.

UV-C from the sun does not pose a threat to vision, since all of it is absorbed in the ozone layer (the thin layer of gases that surround the earth). However, UV-C from man-made sources, like electric welding arcs, is harmful to the eyes if proper protection is not used.

UV-A and UV-B are the rays to avoid. The ozone layer does not absorb all UV-A and UV-B radiation. More and more, studies are showing that exposure to both UV-A and UV-B can cause short and long term damage to your eyes.

UV-A is the weakest form of all ultraviolet. It tans the skin, causes skin aging, wrinkles and is suspected to contribute to cataracts (a permanent clouding of the eye which reduces vision). It accelerates aging of the retina, causing a condition known as age-related macular degeneration (ARMD), which is a leading cause of vision loss and legal blindness among Canadians over 60 years of age. UV-A also damages outdoor plastics and paint.

UV-B, which is stronger than UV-A, is the most harmful. It burns the skin and is known to be a cause of skin cancer. It is mostly absorbed by the eye's cornea (the transparent layer at the front of the eye). Short term exposure to UV-B can cause a sunburn of the cornea (also known as 'welder's flash" or "snow blindness"). Long term exposure can lead to cataracts.

Don't forget your shades in Winter!

Though many people think of sunglasses as a summer accessory, it is important for you to wear your sunglasses in winter too. Ultraviolet radiation is harmful to your eyes, no matter the time of year. In winter, UV is reflected off the snow, as well as beamed directly from the sun!

Be sure to see your optometrist once a year for a thorough eye examination. It is the best way to ensure eye and vision health, and to keep track of your UV protection needs.

Did you know....

A 1 % decrease on the ozone layer results in a 1.1 to 1.4 % increase of UV-B

Group Gear

Source: A Risk Management Committee Forum (Carol Perkins, Alistair DesMoulins)

What Is Group Gear?

The 'blue sheet' is a comprehensive list of suggested clothing and equipment individuals should take on summer or winter day trips and overnight trips. The blue sheet also lists articles that the group as whole should take to meet the full requirements of a trip. This sharing of equipment reduces the total weight carried by the group. Group gear falls into four categories: First Aid, Equipment Repair, Overnight Trips, and Miscellaneous.

First Aid

The blue sheet separates the first aid contents into participant and group kits. Generally each participant should carry a small kit for minor first aid and for personal requirements. A group kit would be capable of more serious first aid.

Equipment Repair

The blue sheet separates the repair kit contents into participant and group kits. Generally if you have unique equipment (ski bindings, etc) you should have the proper parts and tools to repair them (screws, screwdriver, etc). The group kit should be more comprehensive.

Overnight Trips

The blue sheet lists obvious group gear for planned overnight trips: tents, stove, pots, water filter, food storage.

Avalanche Rescue Gear

Transceivers, shovels and probes should be considered group gear. If you are buried in a slide you will be dependent on others to use their equipment to locate and uncover you.

Miscellaneous

There was discussion on:

- all participants could carry a lightweight compact space blanket and the group bring a warmer one.
- on winter trips the group should consider taking a sleeping bag, stove, or a thermarest to keep an injured person warm.
- cell phones and GPS satellite positioning systems that may be useful in the near future.

Who Brings Groups Gear?

All participants should be properly prepared for the trip as their negligence in preparation could affect the group as a whole. For example, if an individual does not have proper clothing then this may force the group to change plans. The coordinator in general should be responsible that someone will supply the group gear. The coordinator should check at the meeting place that this has been done.

Who Should Carry Group Gear?

Ideally the extra burden of carrying group gear should be shared by all. Overnight backpacks can be planned well in advance, and the gear shared amongst the participants. Day trips present more problems with an unknown number of participants and generally less group gear planning. The coordinator should ask for volunteers to carry the group first aid and repair kits. These volunteers should be available at all times to provide the required kits should they be needed. This may mean that they stay near the back if the group is spread out, or at least the coordinator should know their position.

Cold Injuries

Source: Parklands XC Ski Club, Tour Leader Program

FROSTBITE

What it is

Frostbite is freezing of specific parts of the body.

What causes it

When exposed to cold, the body protects the inner core by constricting surface blood vessels. This results in decreased blood flow and heat to surface skin.

Where it occurs

Fingers and toes are most susceptible to frostbite but any part of the body exposed to cold air can be affected. Once a part has been frozen it is more liable to cold injuries on subsequent occasions.

How to recognize it

Frostbite is progressive:

- **Frostnip** - The skin turns white and becomes numb.
- **Superficial Frostbite** - The tissue beneath the surface feels soft and resilient.
- **Deep Frostbite** - The tissue beneath the surface feels hard and wooden.

What to do when it occurs

Frostnip is the only form of frostbite you can treat on the spot.

- act now - hold hands over face and warm with breath
- re-warm fingers under armpits or between thighs
- apply firm steady pressure, do not rub
- if toes are affected, remove boots and hold feet between hands or place on a friend's stomach (keep foot covered with layers of clothing)
- if feeling fails to return, or if skin remains white assume you have a case of superficial frostbite

Treating Frostbite

- **DO NOT ATTEMPT TO REWARM**. Get to a doctor or hospital as soon as possible. The victim can walk or ski on frozen feet without further damage.
- if frozen feet are re-warmed in the field the person immediately becomes a stretcher case. You have an emergency on your hands requiring outside help and a possible overnight survival situation. Should the affected part become frozen again while waiting for rescue, further damage will be caused to the tissue.
- NEVER rub the affected part with your hand or with snow.
- NEVER try to re-warm in front of a fire.

How to prevent it

- To resist frostbite your body needs to be healthy. Do not venture out in very cold weather if you are feeling tired or suffering from a cold or the flu.
- Avoid tight-fitting clothes. Use the layer principle.
- Tight boots constrict circulation and create cold spots. Laces should be loosely done up.
- In windy conditions, put on windproof clothing. Put on overmitts, overboots, or oversocks before you get too cold. Protect your face with a balaclava or scarf.
- Do not touch cold metal with bare fingers (i.e. cameras, metal canteens, ski bindings, snow shovel.)
- At lunch break insulate your feet by keeping your skis or snowshoes on.
- Carefully watch your companions for signs of frostnip appearing on the face. Cheeks and chin are the usual places affected.
- If your feet become numb, wiggle your toes vigorously. If this doesn't work STOP AT ONCE, remove boots and re-warm. Even though the laces may be frozen and hard to undo, persevere.
- Forget about smoking on the trail. Nicotine constricts surface blood vessels, predisposing the smoker to frostbite. The temperature of fingers and toes can drop as much as 5 degrees Celsius.
- Do not overheat. Perspiration leads to more cooling.
- Stay dry, including your feet.

HYPOTHERMIA

What it is

Hypothermia is a disease that can develop quickly and kill you. It is a condition of the body that occurs when the inner-core temperature drops to a level where the vital organs no longer function effectively.

What causes it

Hypothermia develops when your body loses more heat than it can produce. It is caused by exposure to cold, wet or windy conditions and fatigue. The greatest single factor to bring on hypothermia is improper clothing.

Where it occurs

Hypothermia can occur anywhere that the temperature is low enough to reduce the inner-core temperature of the body to the danger level. It occurs most frequently in rugged mountain terrain where a person on foot can pass from a calm and sunny valley to a wind and rain-lashed mountain ridge in a short time period. Most hypothermia accidents occur in outdoor temperatures between -1 and 10 degrees Celsius.

How to recognize it

- In the early stages, hypothermia may be confused with fatigue or intoxication. It is important to remember that the victim is unable to recognize his condition. He may insist that he is fine. Children and adolescents are at particular risk; they have less endurance than adults, tire more easily and are unable to pace themselves. Leaders of youth groups must be constantly on the lookout for early symptoms. Treatment must be prompt.
- The victim feels chilled and begins to shiver uncontrollably.
- As surface blood vessels contract in the body's first defense mechanism, hands become stiff and fumbling.
- The person is unable to think clearly. He cannot make decisions, his speech may be slurred, and he becomes unresponsive to people around him. Often he acts in a totally different manner to normal.
- He stumbles frequently, cannot pick himself up. Shivering may stop at this point.
- The victim has an overwhelming urge to sleep. He lapses into a stupor and finally unconsciousness.
- Death is caused by heart failure.

What to do when it occurs

- Death may occur within one hour of the onset of hypothermia.
- ACT QUICKLY: PREVENT FURTHER HEAT LOSS.
- In the early stages, stop and put on more clothing. Nibble high energy foods. Have a hot drink. Transfer body heat from other members of the group. Build a fire. Although the victim may appear fully recovered and wish to continue with the tour, turn back.
- Treatment in the later stages of hypothermia is much more difficult. Because the person has lost the ability to produce heat, outside heat must be added.
    1. Move the victim out of the wind into the shelter of trees or a boulder. If you have a tent, put it up quickly and get him inside.
    2. Make sure the victim is insulated from ground snow by packs, boughs, etc.
    3. Remove any wet clothing and replace with dry.
    4. Put the victim in a sleeping bag if you have one. Get another person to strip to their underclothes and transfer heat by body contact.
    5. If you do not have a sleeping bag, other members of the party should huddle around the victim in an attempt to transfer warmth. Get a good fire going.
    6. If the victim is conscious give hot sweet drinks like Jell-O or easily digested carbohydrate foods like candies, sugar lumps and dextrose.
    7. If semi-conscious, try to keep the victim awake at all costs. Give hot drinks.
    8. Although the victim is unconscious and may even appear to be dead, redouble your efforts to transfer heat. Well-wrapped hot rocks from the fire or metal canteens filled with hot water placed inside the sleeping bag will help.
    9. Two strong tourers must go for outside help. The rest of the party should make every effort not to become hypothermic themselves. Keep busy. Build a fire and emergency shelters in case the wait for help becomes a long one.

How to prevent hypothermia

- Eat a good breakfast before setting out on the tour. Fats and proteins will supply a constant source of heat throughout the day. During the tour, stop several times to eat high energy foods like chocolate bars, gorp, fruit cake.
- Keep heat in by dressing sensibly. Use the layer principle and include at least one layer of wool. Be particularly careful in windy conditions. Make sure that your outer layer of clothing is windproof and that your extremities are given extra protection.
- Be fit. Fatigue is often associated with hypothermia. Good technique (skiing) will reduce fatigue.
- Breathing through a scarf or the high collar of a sweater can reduce loss of heat by respiration. In this way, air can be re-warmed and pre-humidified before going into the lungs.
- Take care crossing lakes or rivers. Be wary of thin ice where rivers enter or leave lakes. Cross rivers at their widest points where the current is slowest.
- Prevent dehydration by the intake of liquids.
- The body temperature can drop considerably during a lunch break. As soon as you stop, put on your down jacket even though you may be hot from exercise. Conserve heat. During very cold weather, several short five minute breaks for food are better than one long lunch break.
- Don't drink alcohol if you are tired and haven't eaten for some time. Alcohol blocks the release of glucose into the bloodstream and causes a drastic drop in core body temperature.
- If you cannot seem to keep warm on a tour, turn back. You may save your life.

SNOW BLINDNESS

What causes it

Snow blindness is the result of the eyes being exposed to too much solar radiation.

What to do when it occurs

Apply cold compresses, retreat to a dark environment; cover both eyes to prevent eyeball motion. Pontocaine will temporarily allay the symptoms but it will not treat the condition.

How to prevent snow blindness

Wear good sunglasses.

WINDBURN

What it is

A burn like irritation.

What to do when it occurs

Apply a grease or oil based ointment.

SUNBURN

What it is

A first or second degree burn caused by exposure to the suns rays.

How to prevent it

Wear adequate clothing; apply opaque ointments or lotions containing aminobenzoic acid (PABA).

EARACHE

What it is

An irritation of the eardrum caused by the wind.

How to prevent it

Place a plug of cotton or soft tissue in the outer ear canal.

DRY SKIN

What causes it

Cold dry weather; excessive washing with soap.

What to do when it occurs

Apply animal or vegetable oils.

DEHYDRATION

What causes it

Even in a cold environment the body loses two to five or more quarts of moisture per day. Dehydration makes the blood more viscous which lessens cardiac efficiency and decreases the body's ability to carry out its functions.

How to recognize it

Irritability, deep orange or brown urine, economy of movement, headaches, etc.

Treatment/Prevention

Adequate fluid intake.

CHILBLAINS

What causes it

Repeated exposure of bare skin to temperatures between 0 and 10 degrees C.

How to recognize it

The skin becomes red, rough, and itchy, but there is not loss of tissue.

Treatment

Apply a soothing ointment. Prevent further exposure.

"FROSTBITE" OF THE LUNGS

What causes it

Heavy breathing in a very cold environment.

How to recognize it

Breathing discomfort, coughing, asthmatic type reactions, and coughing up blood.

Treatment/Prevention

Pre-warm the air with hoods, masks, or re-breathing tunnels, etc. Humidify the living environment. Eliminate smoking.

IMMERSION FOOT (TRENCH FOOT)

What causes it

Exposure to wet conditions, usually above freezing, for hours or days. This can occur with skiers using ski boots made of non-breathable plastic materials, or if they are using a Vapour Barrier system. Wet socks in leather boots for extended periods of time can produce the same effect. Tissue damage may occur with no more moisture than condensed sweat inside plastic or rubberized boots.

How to recognize it

Cold, swollen, blanched feet that feel heavy and numb. There is a sensation of "walking on cotton wool". This stage is rapidly succeeded by one of hyperemia in which the feet are hot and red. This may persist for days or weeks. Swelling and pain may be severe, and blisters may form, leading even to gangrene. At this stage it may be difficult to differentiate from frostbite, but the damage to nerves and muscles may be longer lasting, and may even be permanent.

Treatment

Dry the feet, add warmth, and restore circulation.

REMEMBER - THE BEST DEFENSE IS:

- **CARDIOVASCULAR FITNESS**
- **GOOD NUTRITION**
- **SENSIBLE CLOTHING.**

Ticks

Source: An article in HI-SA "The Trailblazer" - Summer 1997 by Yore Daniels

Of the 800 or so kinds of ticks in the world about 650 are hard and the rest soft. It's the hard cover tick hikers encounter.

Adult ticks range in size from about 0.4 cm to 1.4 cm long. They are oval shaped and appear to have reddish leathery bodies with eight legs. Of course, spiders also have eight legs so you shouldn't be surprised to learn that ticks are also of the arachnid class.

Ticks hunt by stealthily clinging to grass and shrubs along paths frequented by potential hosts. When a host passes by, the tick climbs on.

On the ground, ticks can also hunt down a host from as far away as 25 feet by homing in on its carbon dioxide emissions. Once on a host, the tick's goal is to attach itself to the skin and have a blood feast. A feeding tick can increase 20 to 50 fold in size.

The mere bite of a tick can deliver disease to the host. However, it is the disease organisms inhabiting the tick's stomach that are the source of the many serious diseases it transmits. Some of these diseases include encephalitis, typhus, Lyme disease, tick paralysis, and Rocky Mountain Spotted Fever. It is for this reason that ticks should be removed as soon as possible and every precaution taken to ensure the tick does not regurgitate the contents of its stomach while attached to a host.

Detaching a tick from its host can be accomplished by waiting for it to become fully engorged and then disengaging itself. Or, by physically removing it.

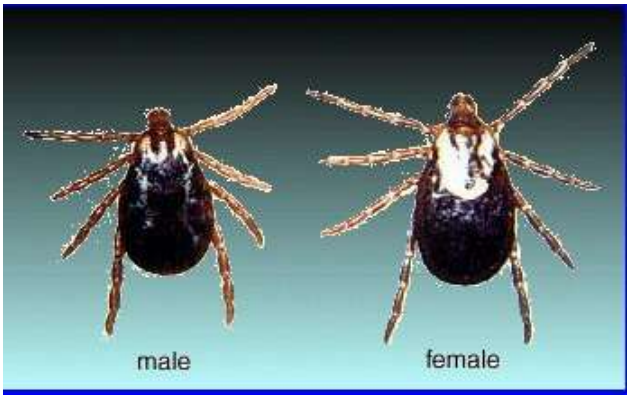
The recommended procedure for this is to gently but firmly grasp the head of the tick with tweezers as close to the skin as possible and apply a steady backward force until the tick releases its hold. Any tick parts remaining in the wound must be removed to prevent infection. If the head is buried beneath the skin and cannot be seized with tweezers, you will require medical attention to remove the tick. Always treat the wound with a germicide or an antibiotic cream. If your tick is from an area where tick disease is known to occur, it is advisable to keep the tick and give it to the attending physician for examination. In Alberta ticks seldom carry serious diseases.

Methods such as using petroleum jelly, oil, tape, lighted matches or alcohol to induce the tick to pull out are not effective and may prompt the tick to empty its stomach contents into the wound.
One technique that may prove effective is to cool the area near the tick with snow or ice. In addition to cooling off the tick's external environment, this intervention would also slow the blood flow in the area. It is possible that the combination of these factors would encourage the tick to detach in order to seek more optimal conditions.

Prevention is the best strategy when dealing with ticks. Common sense says cover up - wear long pants tucked into socks and long sleeved shirts that fit snugly at the neck and wrists. Don a hat. Spray clothing with an effective insect repellent (DEET) or insecticide.

After emerging from tick habitat, immediately check for ticks on humans and animals because it takes ticks many hours to attach to a host and it is easier to remove them before they do so.

Tick season in Alberta is at its peak during the spring. By the end of June ticks are seldom encountered and hikers should be relatively safe.



Bicycling Equipment

Source: An article submitted by Louise Richard, November, 1998

As the Ramblers grow and membership increases, a number of people have asked for more bike trips, and in adding this sport we must be concerned about risk management issues.

Tools and Spares

- bike pump
- tube patching kit
- spare tube (the right size for the tire)
- brake cable
- full set of Allen keys
- small Phillips screwdriver
- chain breaker

Equipment

- a helmet is mandatory on Club trips
- a bell is mandatory in Alberta
- saddle bags or panniers
- first aid kit
- at least 2 water bottles
- whistle (to communicate with those ahead or behind)
- cable lock
- gel seat (optional, great for those long trips)

Suggested Clothing

- lycra or spandex shorts/leggings
- bike gloves (especially for long trips)
- hat, cap, sunglasses
- windproof jacket/pants
- fluorescent jacket and/or vest
- fleece or wool sweater
- rain gear and/or poncho
- extra dry clothing, socks
- neoprene gloves & socks (especially for cold, rainy weather)

Bears, and Other Large Animals

BEARS

Sources: "Bear Attacks - Their Causes and Avoidance", by Stephen Herrero; "Bear Aware", by Bill Schneider - summarized by Bob St.John

Precautions While Hiking

Hike In A Group

And stay with the group. There have been no attacks on groups of 6 or more hikers. Most attacks have occurred on people hiking alone or in pairs. Large groups may intimidate bears or make enough noise to sufficiently warn bears.

Stay Alert

Be observant for bears and for signs of bear. Watch the trail ahead and to the sides. Listen for woofs, snorts, or movement in brush. Check for signs- tracks, scat, diggings, or scratches on trees. Fresh signs should heighten your awareness, but even old signs tell you bears frequent the area. Bears are perpetually seeking food- be aware of bear 'hotspots'. All bears love berries. Grizzlies are attracted to lush meadows and avalanche paths where they seek sweetvetch, cow parsnip, horsetails, roots and tubers. The seeds of the whitebark pine are favorites. Black bears spend more time in the forest. Dandelions are a favorite of theirs. Watch for circling ravens or crows- they may be over carrion protected by a bear.

Make Noise

To reduce the chance of a surprise encounter a bear must sense your presence with sight, sound, or smell. A bear's hearing and sight are about as good as a human's. A bear's sense of smell is extremely good. Sight may be limited if in dense forest or bush, if the terrain is hilly, or if the trail has bends. Your scent will not reach far ahead if there is a headwind or a crosswind. Your sound may not travel far if there is a headwind, or if there is competing natural noise from water or wind. The worst case is hiking into the wind by a rushing stream in dense bush. Make lots of noise frequently- yell, yodel, sing loudly. Bear bells are usually not sufficiently loud, and can be annoying to other hikers.

Hike During The Day

Dawn and dusk are active times for bears. They can also be active at night, especially Black bears. Humans are at a disadvantage when their vision is limited and the chances of a surprise encounter increases. Bears do not expect human activity at these times. If you must travel at night use flashlights and make lots of noise.

Stay On The Trail

Bears usually bed down away from trails and hikers. Bushwacking increases the chances of surprising a sleeping bruin. If you must bushwack makes lots of noise.

Observe Trail Closures

Check with wardens on bear activity. Report any sightings.

If You See A Bear At A Distance

Observe Quickly and Quietly

Check for cubs. If you can try to determine if it is a Grizzly or a Black- this may be difficult. If in doubt assume a Grizzly. Try to determine the direction it is traveling, or if it is feeding. Do not approach for a better look.

Solitary Bear

You should consider changing plans and leave the area. If you must proceed - backtrack some distance, then give the bear 1 km of berth and stay upwind. If you cannot give a wide berth due to terrain and absolutely must proceed then get it's attention - *after locating a suitable climbing tree for yourself.* If the bear behaves properly and retreats then proceed warily and noisily after giving it plenty of time to escape. If the bear holds its ground then it may have unseen cubs, or it may be protecting a food source, or it may be curious (young adult bears are often curious and less predictable). You should re-evaluate your need to proceed.

Female With Cubs

A Grizzly with cubs is extremely protective, unpredictable, and dangerous. ***It is best to change plans and leave the area.*** Black bears are usually more tolerant of humans and you may be somewhat more confident. *Be absolutely sure of your identification*.

If You Surprise A Bear

The Bear's Actions:

- **Retreat:** In the vast majority of encounters the bear will run off.

- **Standing On Hind Legs:** This is not an aggressive action. The bear is trying to determine what you are by getting a better scent or a better look at you.

- **Circling You:** This is not necessarily aggressive. The bear may be getting downwind to get a better scent.

- **Expresses Agitation:** Growling, jaw 'popping', head shaking, ground pawing are signs of agitation- you have come too close or it is protecting cubs or food.

- **Bluff Charges:** In most cases charges stop short or veer to one side - the bear wants to intimidate you. Repeated charges may be made.

- **Contact Charges:** A rare event. Grizzlies may complete a charge if they perceive you as a threat. Blacks almost never complete a charge.

- **A Quiet Or Sneaky Approach:** A young bear may be more curious than fearful of you. In extremely rare cases the bear may be predatory- seeing you as food.

Your Actions:

- **DO NOT PANIC:** If you turn and run in panic you may trigger a chase instinct in the bear which would have normally run off.

- **Slowly Retreat:** If the bear does not retreat and expresses agitation then you are too close. You want to project yourself as a strong animal that does not wish an encounter. Do not turn your back, do not try to stare it down (considered an aggressive action), do not scream. Slowly back away, talk to it in calm tones, keep observing its actions. Try to determine if it is a Grizzly or a Black. As you do this get your bear repellent ready if you have it and/or look for a suitable climbing tree.

- **Bear Charges:** Brace yourself for the worst, hope for the best - a bluff charge. This is when a spray repellent is used. Do not play dead at this stage. In most cases the charge will be a bluff. Playing dead now may induce the bear to complete the charge.

- **Bear Makes Contact:** Play dead. In almost all cases of contact the bear is a Grizzly who perceives you as a threat. If it is convinced you are dead and not a threat it should leave you. Unfortunately you may suffer some harm. Lay stomach down on the ground with your pack protecting your back. Use your hands and arms to protect your neck and head. Lay still and be quiet. When the attack stops do not move until you are sure the bear has left, otherwise it may attack again.

- **Climbing Trees:** If the bear has a long way to come (they run at 60 km//h) and you see a tree close by large enough and easy enough to climb quickly, then this is a viable option. Remember all bears can climb (Grizzlies too). You must climb at least 10 meters to be out of reach. Dropping your pack may delay the bear as well as enable you to climb faster.

- **Bear Spray:** Pepper based spray is proving itself quite successful at repelling attacks. Most wardens and park workers now carry it. It irritates the eyes and sensitive nose of bears. If a bear charges then release a fog of spray between you and the bear. If it gets close spray directly into it's face. Note that a headwind will blow it back and incapacitate you, and a crosswind will dissipate it. If you do carry it then keep it handy - you may not have time to look for it in your pack.

- **A Predatory Bear:** If a Black bear showing no agitation approaches you, especially from behind, then you should consider it being predatory. The advice is to act aggressively to scare it off. If it attacks, fight back- do not play dead. You must be sure it is a Black. If it is a curious Grizzly then continue your slow retreat.

Precautions While Camping

Camp Location:

- **Near Trees:** Trees offer an escape by climbing if a bear enters your camp and a place to hang your food. Small fires, if allowed, give you a chance to burn garbage. If above treeline a nearby cliff can offer similar storage and escape opportunities.

- **Off Trails:** Bears often travel at dawn, dusk and at night. Like us they prefer routes of least resistance. Hiking trails, game trails, creek beds, and lakeshores are utilized for travel. Choose a site well away from these corridors.

- **No Thick Bush:** Bears like to come and go unseen. Thick bush close to your camp offers them cover to approach.

- **Clean Sites:** If an official campsite or popular spot has garbage around, especially food scraps, then camp elsewhere. Chances are bears know of this site.

- **No Bears:** If a bear is seen near the site, or if there is fresh bear sign, or the site is near a current feeding location, move elsewhere.

Camp Food:

- **Cook 100 m Away:** Separate your cooking site by locating it 100 meters downwind from your tent. Any odors will blow away from your sleeping location.

- **Minimize Odours:** Choose food that is simple to cook and not too smelly. Try not to spill anything on your clothes. Keep the site as clean as possible. Try not to have any leftovers; clean dishes soon after use; pour greywater on porous ground if possible - removing any scraps as garbage.

- **Garbage:** Minimize garbage by repackaging meals at home. If fires are permitted then a small hot blaze will consume combustibles and remove odors from cans and tinfoil - which is still your garbage. Do not bury garbage - it will be dug up.

- **Storage:** Store your food and potential bear food (garbage, toothpaste, sunscreen, bug repellent, cosmetics, food soiled clothing, etc.) in double air-tight plastic bags. Store these plastic bags in a waterproof bag. This should keep odors from permeating your tent and clothes while in your backpack.

- **Hanging Food:** Hang your food, stove, dishes, and potential bear food (see above) in a tree 100 meters downwind of your tent. Ideally it should be between two trees and 4 meters off the ground. Remember bears are good climbers. If above treeline a cliff can be used to hang food, or as a last resort store well sealed food on a large boulder 200 meters downwind of your tent. Use storage pole facilities at official campgrounds. If car camping use your car's trunk for storage.

Your Tent:

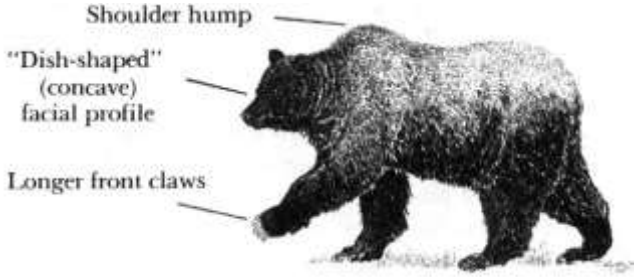
- **Use A Tent:** Sleeping under the stars is not advised in bear country. A tent, though flimsy, presents a psychological barrier to an inquisitive bear. Try not to crowd the walls of the tent- a bear could bite your salami looking butt.

- **No Odours:** Keep only clothes and sleeping materials in the tent. Even your pack should be hung outside - packs are hard to keep odor free. Do keep a flashlight and bear repellent, if any, handy.

A Bear Entering Your Camp

- **Habituated Bears:** Bears that have been successful in getting human food or garbage lose their natural fear of people. If it is a Black bear you may try scaring it off with loud noises and mild aggression. If it is a Grizzly, or if you are not sure, have your repellent ready and/or make for your escape tree. If you have a clean camp the bear hopefully will soon wander off. If you have been careless, and the bear finds a food reward in your camp then it may pose a serious problem for you.

- **Bear Enters Your Tent:** You have no choice but to fight back. This is not a time to play dead.

	GRIZZLY	BLACK
		
Habitat	Occasional in any mountain environment. Usually at low elevations in spring. Usually above timberline in summer. Avalanche paths are a favorite habitat.	Fairly common in any habitat below treeline. Most common in montane woods. Trees offer escape from Grizzlies
Colour	Lots of variation: black to tawny. Grizzled: white tipped hairs especially on shoulders and back. Color often streaky- lighter here, darker there	Black, often with a white spot on chest. Light reddish brown (cinnamon) less common Usually have tan muzzles. Generally uniform color.
Distinguishing Features	Round dished face, smaller ears Very long, usually light colored claws are easily visible Shoulder hump	Long face, larger ears. Short dark colored claws seldom seen Smaller sized bear
Activity	More active in the daytime. Intolerant, shy of humans.	Often active at night. Far more tolerant of humans.
Food	Favorites: sweetvetch, cow parsnip, horsetails, whitebark pine seeds, buffaloberries, other berries Marmots, ground squirrels Weak or young ungulates- often covering their kill with plants and soil Roots & tubers are dug extensively	Diet is 75% vegetarian, 10-15% carrion, 5-10% insects. Spring, Summer: sprouting plants, buds and inner bark of shrubs and trees, flowers - especially dandelions. Fall: fruits, berries
Bear Myths:	**Reality**	
are slow	Bears can sprint 60 km/h over short distances.	
can't climb	All bears can climb. Black bears are better climbers. Large males seldom inclined to climb.	
can't see well	Bears' eyesight is about as good as humans. Hearing is better. Smell is extremely good.	
afraid of dogs	Bears chase and can easily kill dogs. Dogs may run to you for protection.	
can't swim	Bears love water and are good swimmers.	
Blacks are safe	All bears can be dangerous, and should be treated as such.	

SHOULD YOU BE WORRIED ABOUT BEARS?

NO

Being on edge worrying about bears takes away a lot of the enjoyment of being outdoors. By taking the simple precautions mentioned above you will in all likelihood never see a bear let alone make contact with one. You are more likely to be hit by lightning than to be hurt by a bear (there are 190 lightning fatalities for every bear related fatality in North America). In almost all cases bears want to avoid you- let them know of your presence, try not to surprise them. A very few bears have been habituated to people and associate them with food. This habituation is caused by careless people leaving behind food and garbage. Be meticulous about food and garbage, do not give a bear a reason to approach you. If everyone does their part people and bears can co-exist. If you want to worry about bears then worry about their future and their survival. We are the problem, not them.

OTHER LARGE ANIMALS

Source: "Handbook of the Canadian Rockies", by Ben Gadd

ELK and MOOSE

Elk and moose can be nonchalant but usually prefer to avoid human contact. There are two times however when these animals can be aggressive and dangerous:

- **Spring:** female elk and moose will defend their young.
- **Fall:** male elk and moose in rut can be aggressive and unpredictable.

MOUNTAIN LIONS

Mountain lions (cougar, puma) are present in areas we hike, but are seldom seen. Attacks on humans are rare, although children are susceptible, especially when alone. A cougar incident did occur in 1970 on a Rambler hike to Kindersley Pass in Kootenay Park. It is written up in the Ramblers' History book. Daphne Smith become separated from the main group, and while in a wooded section a cougar inflicted a flesh wound to her arm. For about 1 hour she had a standoff with the cougar - basically talking to it and calming it down. When the rest of the group arrived, the cat ran off. Accepted advice is to aggressively fight back if attacked and not to act passively, although in Daphne's case being passive did work. Generally mountain lions do not pose a threat, especially when in a group.

WOLVES

Wolves pose no threat to humans. Consider yourself lucky to see a wolf.

PRIMATES

During the fall hunting season primates can be directly and indirectly dangerous to hikers:

- **Directly:** Hunters have been known to accidentally shoot each other. The occasional cow has been taken. Although the chances of been hit by a stray bullet are low, some precautions can be taken. Make lots of noise, wear bright clothing, and avoid thick underbrush. Sundays are supposed to be safe days, but don't count on it.
- **Indirectly:** Gut piles and carcasses are magnets to bears, which may claim the kill for themselves. Hikers who inadvertently come near these kill sites risk being attacked by a bear defending its food source. Be alert for circling scavenger birds and odors of decaying flesh.

Map and Compass Reading

Source: summarized by Alistair Des Moulins

A topographic map is a two dimensional representation of part of the earth's surface. Contour lines, colours, and shading are used to indicate elevation.

There are four pieces of information you need to know about a map before it can be of much use to you. These are:

1. **Scale**,
2. **Orientation** – which direction is North,
3. **Magnetic Declination** – the difference in direction between true north and magnetic north, and
4. **Contour Interval**.

Not all maps give you all this information. City street plans are particularly bad.

1. Scale of the Map

The Scale of a map tells you how many units of length on the ground are represented by 1 unit of length on the map. Without this information you do not know whether one centimeter on the map represents 1 kilometer, 2 kilometers, or 10 kilometers on the ground.

The topographic maps used for hiking in in the Rocky Mountains have a scale of 1:50,000, i.e. 1 cm on the map represents 50,000 cms (or 1/2 km) on the ground. There are also 1:250,000 maps which cover a larger area in less detail - these are useful for identifying mountains which are further away or for planning longer trips.

Some Scales and their Meanings

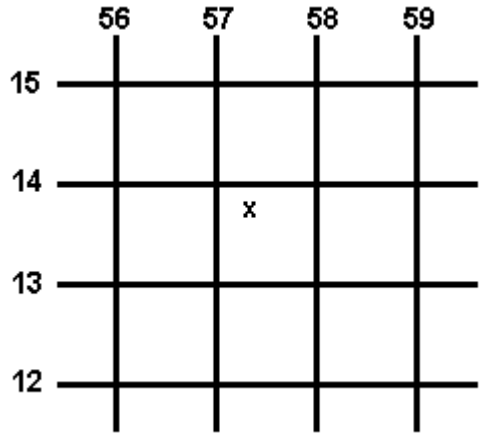
Scale	Metric Meaning	Imperial Meaning	Comments
1:50,000	2 cms to 1 km	1.25 inches to 1 mile	Canadian, British, and European maps
1:250,000	1 cm to 2.5 kms	1 inch to 4 miles	Canadian and other maps - used to get overall view of area
1:63,360	1 cm to 2/3 km	1 inch to 1 mile	Old British maps
1:62,500	2 cms to 1.25 km	1 inch to 1.04 miles	US topographic maps (15 minute series)
1:25,000	4 cms to 1 km	2.5 inches to 1 mile	More detailed maps (US, Canada, Britain, and Europe)
1:40,680	2.5 cms to 1 km	1 inch to 1 km!	Some newer US maps

2. Orientation of the Map

There should be some indication of which direction North is on the map. Many maps have grid lines criss-crossing the map. Normally these run North-South and East West. However this is not always the case. There is a 1:250,000 scale map of Jasper National Park that does not follow this norm.

Grid References

Grid lines are drawn on our 1:50,000 maps at 1 km intervals. A grid reference locates a position to the nearest 100 meters. However any 6 digit grid reference will also occur at points 100 km north, south, east and west of this point. So for a more precise reference always quote the map number or the full grid reference using the other numbers on the side of the map close to the corners.



The grid reference of point x is **574138**

Point x is 4/10ths of the way from the 57 line to the 58 line

Point x is 8/10ths of the way from the 13 line to the 14 line

3. Magnetic Declination of the Map

There are 3 different Norths that we need to know about:

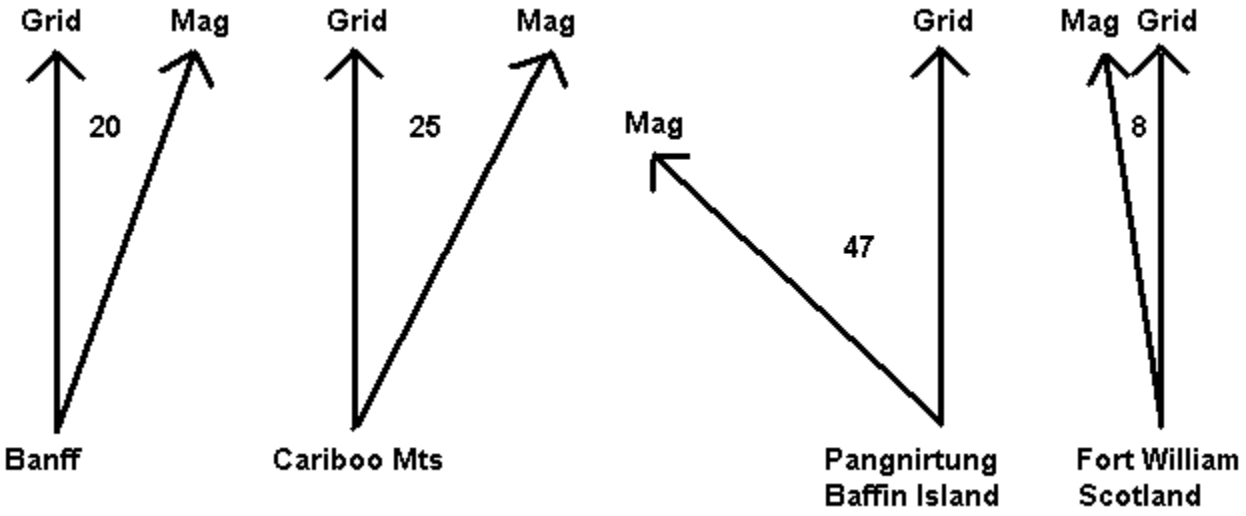
- **True North** - This is the direction towards the North Pole. Lines of longitude meet at the North Pole.
- **Grid North** - This is the direction of the North-South Grid lines on the map. As grid lines are parallel lines not all of them can point to the North Pole. So there is a small difference between grid north and true north because the earth is a sphere and the map is flat.
- **Magnetic North** - This is the direction that the compass needle points. The position of the North Magnetic Pole varies a bit from year to year. In 2006 it was northwest of the Canadian Arctic Islands and moving northwest at a rate of 40 kilometres per year.

The **Magnetic Declination** at a point on the earth's surface is the angle between grid north and magnetic north.

Somewhere on the border of most maps there is a set of arrows to indicate the relationship between the 3 norths at a particular point on the map. Usually, there will also be a narrative like:

> *Magnetic North for Banff was 16 degrees east of grid north in January 2015 and this angle is decreasing by 9' a year. (1' means 1 minute or 1/60th of a degree. There are 360 degrees in a circle.)*

Some examples of magnetic declination:



Knowledge of the magnetic declination is needed in order to use the compass correctly to either find your way or identify distant mountains. Most maps and compasses have 360 degrees in the circle. However in Norway they use 400 degrees to the circle - so beware!

Taking Compass Bearings

From Map to Ground

This technique is used for finding out which way you want to go from a known point - used for navigation in treed areas and in bad visibility conditions above treeline.

Using a compass with no built in adjustment for magnetic declination:

1. Place a corner of the compass that is closest to the string hole on your known position on the map.
2. Align the long side of the compass along the direction you wish to travel.
3. Rotate the circle part of the compass so that the North mark on the compass circle and the lines within it align with the north-south grid lines on the map. N.B. The position of the compass needle and the orientation of the map are irrelevant!
4. Read off the number on the circle part of the compass by the arrow or mark towards the direction you wish to travel. (This is the angle between Grid North and the direction you wish to travel)
5. Convert this angle to a magnetic bearing by using the diagram of the 3 norths on the map: Place the compass on the norths diagram with the N of the compass circle pointing to grid north on the diagram. Rotate the compass circle the required number of degrees towards magnetic north on the diagram.
6. Put the map away and align the compass so that the North end of the compass needle points to the North mark on the compass circle.
7. Walk in the direction to the arrow or mark on the compass - keep watching that needle!

Using a compass with a built in adjustment for magnetic declination:

1. Make sure the declination marker arrow is set correctly for the map you are using.
2. Place a corner of the compass that is closest to the string hole on your known position on the map.
3. Align the long side of the compass along the direction you wish to travel.
4. Rotate the circle part of the compass so that the North mark on the compass circle and the lines within it align with the north-south grid lines on the map. N.B. The position of the compass needle and the orientation of the map are irrelevant!
5. Put the map away and align the compass so that the North end of the compass needle points to the declination marker arrow.
6. Walk in the direction to the arrow or mark on the compass - keep watching that needle!

From Ground to Map

This is used for:

(i) Identifying unknown objects or mountains from a known point or

(ii) Finding your unknown position on the map from 2 or more known visible objects.

Instructions for (i) below:

Using a compass with no built in adjustment for magnetic declination:

1. Point arrow in body of compass at unknown object.
2. Rotate the circle part of the compass so that the north end of the compass needle points to the north mark on the compass circle. (Keep compass body pointing at the object)
3. Read off the number on the circle part of the compass by the arrow or mark on the compass that was pointing towards the object. (This is the angle between Magnetic North and the direction of the unknown object)
4. Convert this angle to a Grid bearing by using the norths diagram on the map. Place the compass on the norths diagram with the N of the compass circle pointing to magnetic north on the diagram. Rotate the compass circle the required number of degrees towards grid north on the diagram.
5. Get the map out. Place a corner of the compass that was nearest you when you looked at the object, on your known position on the map. N.B. The position of the compass needle and the orientation of the map are irrelevant!
6. Keeping that corner of the compass in place align the long side of the compass so that the North on the compass circle and the grid lines in the circle align with the North-South grid lines on the map.
7. The unknown object is somewhere on the line of the long side of the compass in the direction of the arrow on the compass body. You will need to extend the line beyond the compass. The object may not be on your map!

Using a compass with a built in adjustment for magnetic declination:

1. Make sure the declination marker arrow is set correctly for the map you are using.
2. Point arrow in body of compass at unknown object.
3. Rotate the circle part of the compass so that the north end of the compass needle points to the north end of the declination arrow of the compass. (Keep compass body pointing at the object)
4. Get the map out. Place a corner of the compass that was nearest you when you looked at the object, on your known position on the map. N.B. The position of the compass needle and the orientation of the map are irrelevant!
5. Keeping that corner of the compass in place align the long side of the compass so that the North on the compass circle and the grid lines in the circle align with the North-South grid lines on the map.
6. The unknown object is somewhere on the line of the long side of the compass in the direction of the arrow on the compass body. You will need to extend the line beyond the compass. The object may not be on your map!

4. Contour Interval of the Map

A **contour line** is a (usually brown) line on a map joining points of equal altitude (height above mean sea level).

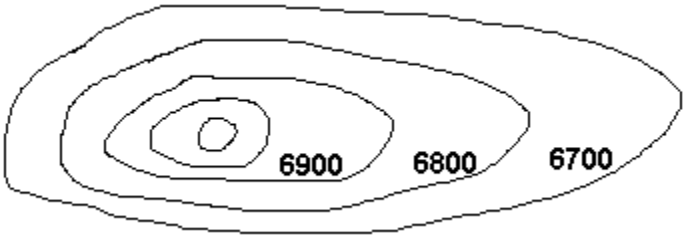
The **contour interval** is the distance vertically between the altitude each individual contour line represents. When reading a map, contour lines give you information on what the topography of the area is likely to be. The closer the contours the steeper the ground. By interpreting contour lines it is possible to imagine a 3 dimensional picture of what the ground might look like.

Some 1:50,000 scale maps of the Rocky Mountains have a contour interval of 100 feet; i.e. separate contour lines are drawn joining points of altitude 4000, 4100, 4200, 4300 etc feet above mean sea level. 1:250,000 maps of the area have a contour interval of 500 feet. Using a 100 foot interval on these maps of the Rockies would make them too cluttered. There are some 1:50,000 scale maps of the Rockies that have a 20 meter contour interval below 2000 meters and a 40 meter interval above 2000 meters - these can be very confusing. Others have a 50 meter contour interval. So it is important to check the contour interval on every map! However in Saskatchewan some 1:50,000 scale maps have a contour interval of 10 feet and 1:250,000 scale maps have a contour interval of 100 feet. This is necessary to show any variation of altitude there. In the mountainous areas of the US, contour intervals seem to be 80 feet on the 1:62500 scale maps and 40 feet on the 1:40680 scale and 200 feet on the 1:250,000 maps.

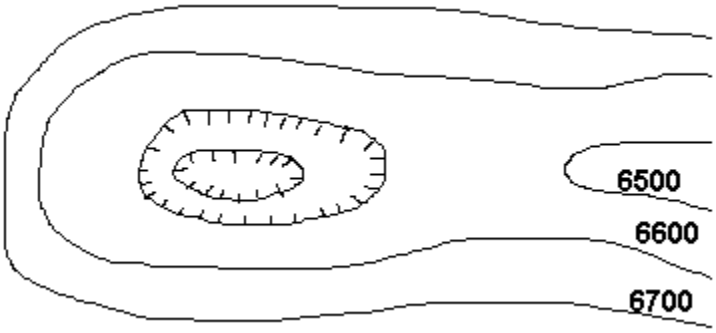
Understanding Contour Lines

At first glance all the wiggly brown lines on a map may seem meaningless but detailed study of them can reveal a lot about the landscape. With practice, from studying contour lines you will be able to form a 3-dimensional picture in your mind of what an area may look like.

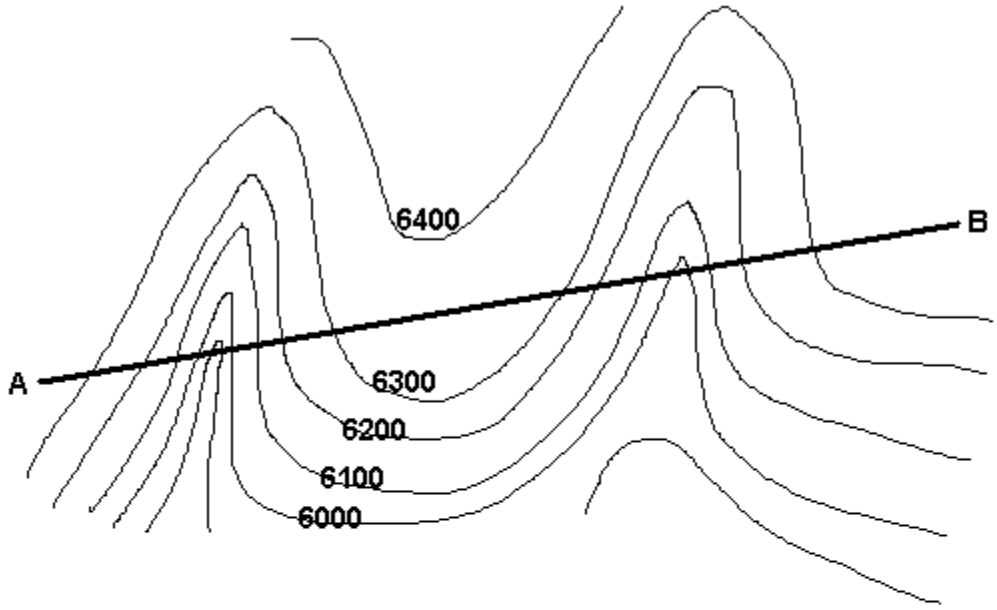
- The closer the contour lines the steeper the ground.
- Closed contour lines represent mountains or hills.

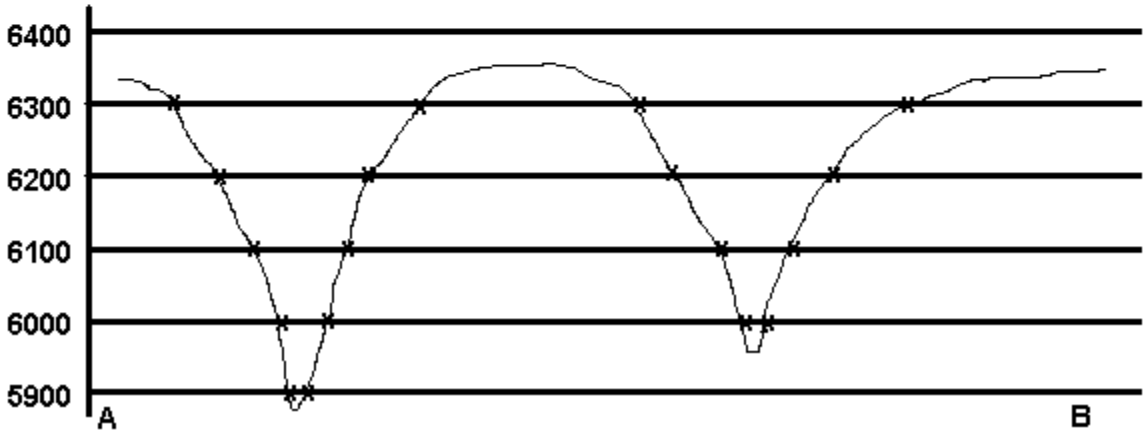


- Closed contour lines with dashes represent depressions or hollows.

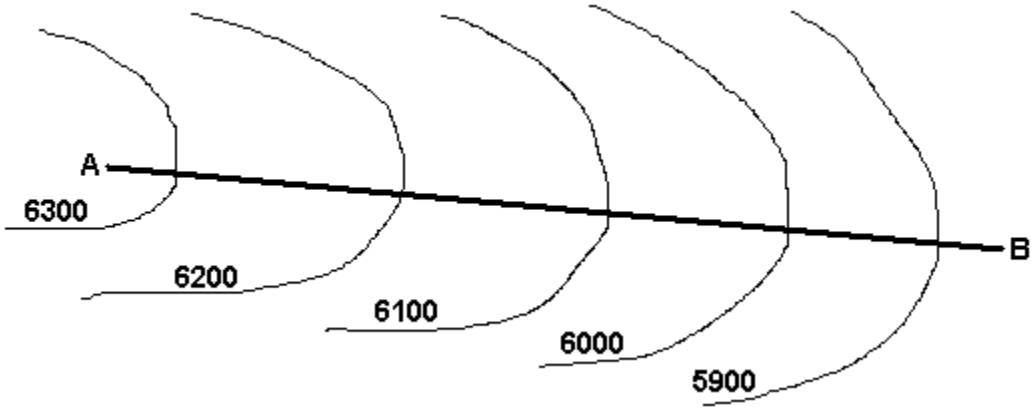


What about other shapes of contours that represent ridges and valleys? Which are the ridges and which are the valleys? The analysis is often made easier by there being a blue line representing a stream, and streams usually run in valleys. A good way to find out where the ridges and valleys are is to **Draw a Section:**





One must realize that this is an approximation of the terrain. The following illustrates two equally valid interpretations of contours:



With continued study of topographic maps and contour lines you will be able to picture your hike from the map while sitting in your armchair. However that must not stop you getting out there and doing it!!

Leave No Trace

Sources:
Most of this material was compiled for the Rocky Mountain Ramblers' Annual Field Orientation Day, held in May, 2000. Some of the publications consulted include:

- "What I Can Do for the Environment", (Action list of Environment Council of Alberta)
- "The Back Packer's Handbook", Campus Recreation, Outdoor Program Centre, University of Calgary, 1990
- "Environmental Respect", by Albert R. Huck and Eugene Decker, pub. Safari Club International Conservation Fund, 1976

Also helpful were the suggestions of several knowledgeable and experienced Ramblers.

The desire for Wilderness Experience lures more and more people away from their comfortable TVs and into the Outdoors - to hike and ski, backpack and camp, snowshoe or mountain bike, take pictures, identify flowers.

All this activity puts tremendous pressure on outdoor spaces as we pass through them. As a result, Outdoor Clubs everywhere are realizing that a few guidelines are needed to help protect the wild areas and ensure we reap the greatest enjoyment and thrills while preserving the beauty and the challenges for future enthusiasts.

***LEAVE NO TRACE - A Guide to Bush Etiquette**, below, is a list of Pointers to help you make the most of your Wilderness Experience while still leaving something for the next person to discover and cherish.*

Courtesy

Talking

- Keep voices down - except in bear country.
- Respect the desire of others to listen to the sounds of the forest or the meadows. Even in a group, some would like to hear a bird sing or a coyote yip.

Private Property

- Don't trespass, get permission.
- Leave gates the way you find them.
- Don't approach or antagonize stock animals.

Leave It Where You Find It

- Brilliant flowers? Unique fossils? Sheep horn? Leave it for the next person to wonder about also. Take a picture instead.

Don't Intrude

- Leave the bright colours at home unless it is hunting season. Allow your orange garbage bag to be your signal if you need help. Otherwise, keep it tucked away out of sight.
- Avoid perfumes, fragrant sunscreens, and other scented creams.

Damage Control

Parking

- Park in established places, on pavement or gravel, not on a roadside meadow.
- Park safely.

Group Size

- Truly a case of small is smart - small groups, 3 to 4 is best, maximum 8 to 10.
- Split larger groups into sub-groups. It is easier on the environment but it's also easier to keep track of everyone.

Extended Stops (e.g. lunch)

- Park yourself on rocks, gravel streambed, *dry* grassy meadow. Not only will you **not** get a wet bottom, you'll also save wear on the landscape.

Erosion

One of the most serious results of activity. Trails can become braided, deeply rutted, the surface rooted or rocky. Bikes make narrow grooves. Boots widen and horses deepen paths into trenches.

- **Boots**
    - Bare feet or lug soles? Consider damage to plants and ground vs. risk management concerns. Wear the lightest boot you can hike in with least risk (sturdy boots for rocks, runners on an easy dry trail).
- **When to Spread Out, When to Go Toe-to-Heel**
    - When an alpine meadow is full of fragile plants, spread out and walk gently & softly.
    - Walk on rock when possible.
- **Switchbacks**
    - Use them. They help prevent erosion from sliding feet, running water, rolling rocks. **Never, never, never shortcut**.
- **When it's Too Steep**
    - If you need to dig in your toe (going up) or heel (down), it's too steep. Find a gentler slope and zig-zag.
- **Mud, mud, mud**
    - Walk on the trail.
    - Avoid making braids, widening the trail. Braids are for hair, not trails.
    - In the ***Season of Mud*** (Spring) consider choosing a route which is less likely to be muddy.

Camping

Campsites

- Use existing sites if available.
- Small is beautiful. Applies to the site and to the fire (if you must have one).
- Observe the 60 m. rule. Stay at least this far from any water body.
- Get off the trail.
- Do not change the site you use. Don't cut down the trees, build huts, dig trenches. If you have to alter a site (some emergency), return it to its natural state before you leave.

Waste

- All the guidelines under previous headings apply, of course.
- Take your waste water at least 60 m. away, both from water bodies and from camp. Use biodegradable soap. Strain the water and scatter it. Bury the lumps deep or pack them out.

Protecting The Land We Travel Through

Garbage

- Take out what you brought in. Good idea also to pack out what other thoughtless people left behind.
- If it doesn't grow there, don't leave it there. (Bananas in the Whaleback? Oranges and apples on Mt. Allen? Really?)
- Garbage can injure animals.
- It can lure animals to the area.
- Looks unsightly.
- Remember, your scent is on that garbage. Animals may decide that anything with that scent is food, including you!

Blazes, Marking the Path

- Don't cut or paint trees. If you *flag* your route, *remove* everything on the return trip. Of course, this means you have to return the same way (wasn't that why you flagged it in the first place?).

Shortcuts, Definite NO NOs

- We've said it before: Don't make 'em, don't use 'em. They cause gullying, erosion.
- Block them off to prevent others using them.

When Nature Calls

There are whole books written on this topic! Briefly:

- Go off the trail.
- 60 m (200 ft) from water. How far is 60 m.? For the city dwellers, most city lots are 10 to 15 m. wide. So, think in terms of 4 to 5 city lots. (Or how about 15 SUVs parked end to end?).
- Urine kills plants (it's acidic). Animals will often eat these plants for the salt on them. Find a rock, some bare ground or dry forest under-storey.
- Put solid waste in 2 to 6 inch deep 'cat holes' in the biologically active soil (the dark, loamy stuff) OR put it in a plastic bag and pack out.
- Burn toilet paper or pack it out in a plastic bag.
- *Always* carry out tampons or menstrual pads (blood attracts animals).

Repairing/Maintaining

- Take a few minutes to leave the trail better than you found it.
- Drain off pooled water. This saves it from becoming mud and lessens the likelihood of others going around it and causing a braid.
- Scuff berm (that little ridge at the side) back onto the pathway.
- Block off shortcuts. Can't stress this too much.

Animal Interactions

Pets

Man's best friend can be a nightmare in the wild.

- Dogs are best on leash, under control at all times. In Canada's National Parks it's the law.
- Loose pets can irritate, even frighten other hikers.
- Dogs can harass wild animals and birds and lead them back to hikers on the trail or, sadly, be attacked or become frightened and lost.

Recognize Habitat - deer, wolves, birds, plants

- Learn what to look for to recognize where the animals may be (e.g. shoreline grasses for bird nests) and avoid.
- Avoid disturbing the riparian habitat (that green strip along the water's edge where lots of birds and small animals hang out).
- If you see wild animals, especially young ones, or nesting birds, make a wide detour around, preferably downwind of them.

Feeding Wildlife - Another NO NO

This seems to be one of the hardest things for outdoor enthusiasts to avoid. Everyone seems to want to 'look at how this bird takes this cookie from my hand'. You are not doing that bird any favours. Human food is for humans alone.

- Habituates animals and birds to expect treats and often results in 'biting the hand that feeds'.
- Bad diet (e.g. salt, other chemicals).

Meeting Horses, Other Stock

- Stay on the *down* side of the trail. Horses are front-weighted and it is easier for a rider to guide them up a hill than down.
- NEVER try to pat one as it goes by.

On The Water

Water Bugs (canoeists, kayakers, swimmers) may not have to worry about many of these guidelines but they do need to be much more concerned in protecting that riparian zone (remember, it's the strip along the river bank).

Courtesy

- Respect the landowner's rights as you pass by. Don't camp on their property without permission.
- Keep your voices down. Sound carries even further on water than on land.

Other Life

- Avoid disturbing animals (domestic or wild) and water life.
- Observe but don't touch.

Let Your Motto Be

Walk Softly, Walk Gently

Leave It Better Than You Found It


ROCKY MOUNTAIN
RAMBLERS ASSOC.