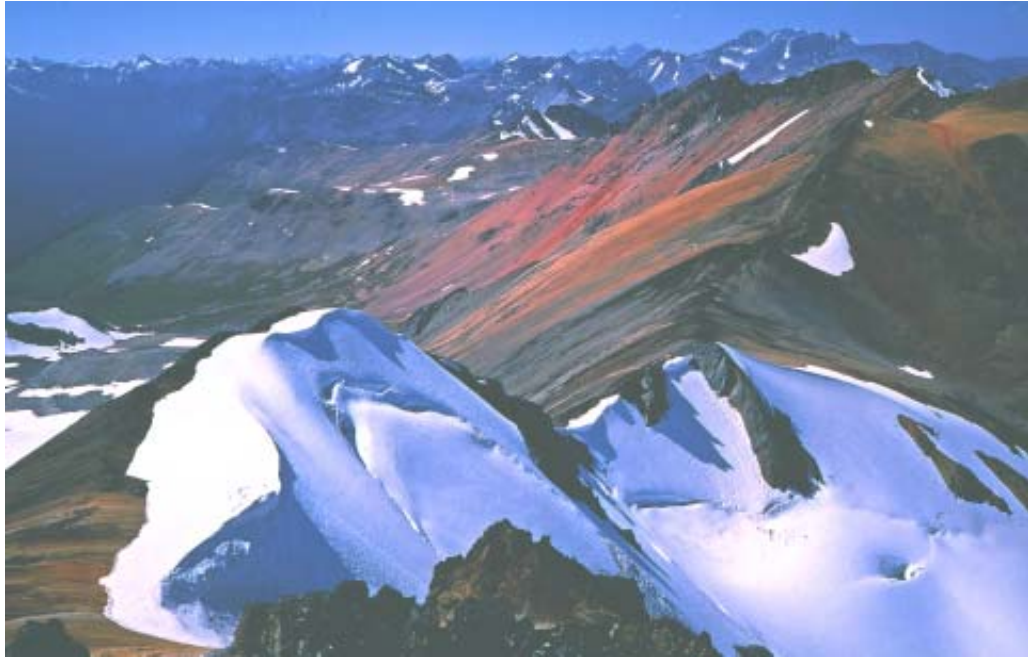


THE B.C. MOUNTAINEER



2004



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Front Cover: Mountain reflection, mountain goat, and John Clarke. Photos - J. Clark collection

Inside Front Cover: top - NW along Warner Ridge, Southern Chilcotin Mtns. Photo - B. Wood
bottom - Evening at Wedgemount Lake. Photo - S. Tate

Inside Back Cover: top - Side-track Mtn. with ice-cored moraine and Lizard Ck. basin, Southern Chilcotin Mtns. Photo - K. Ricker.
bottom - Looking S to Pk. 2290m, Middle Ground. Photo - P. Pare.

Back Cover: Sunsets in the Coast Mtns. Photos - J. Clark

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Central Coast Mountains peak in John Clark country. Photo - J. Clark.

DEDICATION

This issue of the B.C. Mountaineer is dedicated to John Clarke, an honorary member of the club who died from cancer in January, 2003. John had many talents, one of which was photography. Some of John's photographs, kindly supplied by Lisa Baile, grace this issue of the B.C. Mountaineer. Obituaries for John appeared in the March, 2003, BCMC newsletter. Extracts from those obituaries follow:

"John was one of the most outstanding explorers of the 20th century of B.C.'s Coast Mountains, having explored a vast area stretching from Vancouver north to Prince Rupert, probably making more first ascents in these mountains than any other person. Many of these ascents and much of his exploration was done solo, putting him on par (given advances in technology) with our most renowned early explorers, such as Simon Fraser and Alexander Mackenzie. For his mountaineering achievements he was made an honorary member of the BCMC and the ACC.

John was a genuinely humble person who was driven by simply a love of the mountains, a love of exploration, and a desire to instill such love in others. John devoted much of his recent life towards protecting B.C.'s natural environments. He did this by bringing diverse groups of people together through education and by giving them satisfying outdoor experiences.....

The quality of John's presentations and his popularity as a speaker were due to the fact that John was an excellent communicator. He was an excellent photographer and a witty and entertaining speaker. His knowledge of B.C.'s coastal environments and issues associated with them, was unsurpassed. Such knowledge, combined with a love and enthusiasm for these environments, and a desire for others to love them as well, contributed to his effectiveness as a communicator.

His parting comment to me, so characteristic of John, after I saw him for the last time in the Palliative Care Unit, was - "You know where to



find me".

Yes, John, we know where to find you - wandering through tall green forests, up past cool, clear cascading streams to the snowy granitic ridges of the Coast Mountains; wandering around flowery alpine meadows beside pikas and marmots; scrambling upward with the mountain goats; floating and soaring with the Ravens in the sky;

ever upward."

Michael Feller

"John completed his secondary education at the Benedictine Monastery in Mission and I know there was the thought that he might have what is called "a vocation", a calling to the priesthood.... John's monastery was to be a lot bigger - the Coast Range mountains of British Columbia.

John left us with so much. Through interaction with individuals John touched the lives of all of us. We will never be the same.

.....It is difficult to capture in words what characteristics made John unique and explain how he was able to touch us and influence the lives of so many people, even those who knew him only briefly. But words are how we communicate, so Lisa and I have come up with some adjectives to describe John.

John was:

Focused - John was the most focused and purposeful person we know and his single mindedness allowed him to accomplish the major achievements of his life - the exploration of the Coast Range mountains and the education of BC's youth about the vital and enduring value of wilderness. John had a remarkable ability to shut out the clutter of the modern world and ignore the distractions interfering with his main goals.

Funny - His sense of humour and his timing were astonishing. John's one-liners are as legendary as his many first ascents!

Humble - John never sought the limelight. When

he received awards, like his recent Order of Canada, he said, "awards are for Mother's - this is for my mother, Brigid."

Fun - Above all John was fun. When John was around it was like the sun had come out.

Passionate

Contagious - He was like an infectious disease you didn't want to recover from!

Genuine

Adaptable - John learned to be adaptable in the mountains, but he was especially adaptable to people. He could equally captivate a classroom of 1st graders or a roomful of seniors by adapting to their age, culture and issues. He could play endless hide and seek with 5 year olds and could even hold an auditorium full of Surrey 10th graders captivated, at least for awhile!

Gracious and Accepting

Resolved (Lisa sometimes even said stubborn)

Incorrigibly Enthusiastic

Original

Unpretentious

Generous

Uncomplicated - What you saw is what you got.

Complicated - The wisdom which went into some of John's famous one liners could fill a book!

Unspoiled - John retained his childish wonder with the miracle of life. John taught us that we must strive to retain or regain this wonder of life and wilderness and the resolve to preserve them.

Lovable"

Peter Pare

"John's relationship with the Coast Range mountains was extraordinary. It was a lifelong love affair that never wavered. He embraced the mountains on their terms. And, as he'd tell you, he was not the one who was in control. There was never any question in John's mind whether he would go there or not, only where; going with the wind, the changes in season, adapting to the circumstances, at one with wild nature. He took and gained spirituality from the wilderness, never asking for more than it could give - patient, careful, passionate and respectful. John never took the mountains for granted. He remained in awe of their beauty, fragility and strength.

I'll never forget the time when, after a long, steep hike up from the beach, John and I finally emerged into alpine meadows with the Coast Range spreading before us in all their magnificence in the setting sun, and John whispered, as one united with a lover, "Ah - my Coast Ranges". That was the summer of '96 - John's third year of foregoing his climbing season, after the death of Randy Stoltmann and John's 'conversion' to conservation work. He stopped his half-year annual expeditions, and turned his incredible energy and focus toward taking the wilderness to the people of British Columbia.

It was John's intimate knowledge and special relationship to the land - their land - that attracted the attention of the Squamish Nation. Here was a man who had traveled in their traditional territory in the paths of their ancestors, and who was dedicated to conserving the place that they called home. In 1997 John, Chief Bill Williams of the Squamish First Nation, and photographer Nancy Bleck initiated the *Witness Project*, providing a unique opportunity for city folk to reconnect with nature to take part in a First Nations witness ceremony, and to appreciate firsthand the importance of BC's wild places and sound environmental stewardship.

The Squamish Nation gave John the highest honor. They adopted him at a traditional naming ceremony. They called him *Xwexwselkn* or 'Mountain Goat'. As many of you know, John had many attributes of the mountain goat: a shock of snow white hair and beard; his trademark climbing uniform - white long johns and a white cotton recycled dress shirt. Like the mountain goats John preferred to spend the majority of his life in the high, remote peaks. However, like the mountain goats, in the winter months he was obliged to descend to the lower valleys for shelter and nourishment.

John and I started the Wilderness Education Program in 1996. John's unparalleled knowledge and passion for wilderness, his unique sense of humour, and his special ability to connect with his audience, no matter what their age, played an enormous part in WEP's success and recognition. In the last 6 years of his too-short life John brought wilderness to the lives of over 35,000 young people in the Lower Mainland of B.C., dis-



John revered coastal B.C. old growth forests.
All photos - J. Clark or J. Clark collection.



Joys and challenges of B.C. Coast Mtn. mountaineering. All photos - J. Clark or J. Clark collec-

tilling his decades of wilderness exploration and thousands of beautiful photos into captivating, informative, and often hilarious, classroom presentations....WEP continues as a legacy for John and the young people of BC.

In 2002, John added the Order of Canada, our country's highest honour, to his numerous awards for environmental education and community service.

John's lifestyle and lifelong love affair with the mountains had convinced him that he would never settle down and have a family. And he would say "I have made many women happy by not marrying them". However, in 2001, he met and fell totally in love with Annette Lehnacker, a talented, beautiful woman from Germany. John and Annette shared a deep love of nature and a fundamental belief that they could make the world a better place. They were married at a First Nation Shaker Ceremony at Lighthouse Park in West Vancouver, surrounded by their closest friends and family. On January 14, 2002, their son Nicholas was born.

.....John was an inspiration to all those who visited him during his last weeks of life. He showed us how to live to the last and how to die with dignity, humour, and peace. John remained childlike all of his life. And this was one of John's most endearing characteristics; his sense of fun and wonder, unbridled joy, and boundless, irrepressible energy. Children accept help and care and love, but for independent adults this is often difficult to do. In his last months and weeks and days, John accepted care and help and love easily, with grace, good humour and appreciation.

Given the situation of becoming increasingly dependent, you might suppose that John would finally lose his sense of humour. But not a bit, it remained indelible - his legendary one liners continued to the end.

John Clarke was and always will be a hero, a legend, a role model and an inspiration. The world is a better place for his having lived here. Our lives are enriched beyond measure.

Lisa Baile

Solitary camps in the Coast Mtns and Annette, John, and Nicholas, 2003. All photos - J. Clark and J. Clark Collection.



THE BRITISH COLUMBIA MOUNTAINEERING CLUB

Club Philosophy

The British Columbia Mountaineering Club is a 97-year-old incorporated society founded in 1907. Its pioneer members did much of the early exploration and mapping of the then unexplored mountains near the young city of Vancouver. Most of the mountains in the lower mainland of B.C. were first climbed by BCMC members.

Today, the BCMC is dedicated to the enjoyment and exploration of the mountains, valleys, and alpine regions of British Columbia through activities such as climbing, hiking, backpacking and ski touring. The primary mode of travel is by foot. Mechanized transport is secondary and is restricted to access only. The club feels that pedestrian access allows the greatest appreciation of the mountains with the least impact.

In addition to direct involvement in the outdoors through trips and camps, the Club is active in conservation, trail and hut construction and maintenance, mountain safety, and education. The club has assisted in publishing several guidebooks, including Kevin McLane's "Alpine Select" guide, the Alpine Guide to Southwestern B.C., 103 Hikes in Southwestern British Columbia, A Climber's Guide to the Squamish Chief, Guide to Climbing in South-western British Columbia, and the Stein Valley Wilderness Guidebook. Club members regularly act as volunteer instructors in basic summer and winter mountaineering courses offered by the club to its members.

The club has been very active in conservation land use issues almost from its inception. The existence today of Garibaldi Park is a direct result of the discovery and exploration of the area by the Club. After the 1926 camp, members of the club petitioned the provincial government requesting protection of the area as a park, and in 1927, the Garibaldi Park Act was proclaimed.

More recently, in the 1970's it was a club member who first drew the attention of society to the values of the Stein Valley. During the 1980's it was club members who were most active in defending the interests of wilderness ski tourists against commercial heliskiers. In the 1990's, club

members were involved in B.C.'s Protected Area Strategy and have been instrumental in the establishment of Pinecone – Burke and Tantalus provincial parks, as well as others. Today, club members are actively involved in attempts to protect some areas against the intrusion of motorized recreation, particularly snowmobiles. The club continues to play an active role in land use issues relevant to B.C. mountaineering.

Club Trips and Activities

The Club runs a website (www.bcmc.ca) in which its various activities are described.

The most important function of the Club is the running of an extensive schedule of different grades of hiking, climbing, and ski touring trips. Usually, a variety of overnight and day trips is scheduled each weekend throughout the year. These trips are all free and are also open to prospective members.

Club members organize yearly summer climbing camps to various parts of the province. Numerous climbs, many of them first ascents or new routes, have been made in such areas as the Kakwa, Kawdacha, and Monkman areas, N. Rockies, (1993-1995), the upper Lillooet (most recently in 1993), the Chilko Lake area (1992), the Pantheon Range (1991), Clendenning Ck. (1990) Banff park (1989), the Premier Range (1987), Lake Lovely water (1999-2003), the Falls River/Tchaikazan region (1986, 1988), Ape Lake area (1983 and 2001), the Mount Waddington area (most recently in 1999, 2000, and 2004), the Bendor Range (2002-2003) and the Selkirk Mountains (most recently in 1999 and 2000).

Occasionally, expeditions are organized by the club to more remote areas such as in Alaska or South America.

The ski touring program occurs throughout the winter and spring. This has included a Christmas ski camp as well as spring ski camps to such areas as the Lillooet Icecap, Kokanee Glacier, Bridge Glacier, Fairy Meadows, Columbia Ice Fields, Stanley Smith-Lord Glacier area, Franklin Glacier, the Southern Chilcotin and the

Homathko icefield.

Rock climbing practice is held mid-week during the summer months. Beginners can receive instruction and more advanced climbers can hone their skills. Rock practice is held in the evening at Lighthouse Park, Murrin Park, the Chief, or at Smoke Bluffs. In winter, mid-week night skiing is organized at the local ski hills.

To help the beginner in developing his or her climbing skills, the Club organizes instruction courses and from time to time organizes training climbs. The purpose of these climbs is to allow people to gain experience on roped climbs.

In December and June the club publishes its 6 monthly trips programs. Updates are given in club newsletters and on the club's website.



In the BC Mountaineering Club one learns to appreciate outdoor cuisine (photo - J. Clark collection),

Social Events

Social gatherings are held monthly from September through June on the second Tuesday of each month at 7:30 pm, usually in the upstairs room at the ANZA Club, corner of 8th Avenue and Ontario Street in Vancouver. The meetings are informal and the chairs comfortable. Beginning

with general club business, there is usually a slide show, film, or talk on some aspect of mountaineering. In the past we have also featured product demonstrations by local mountaineering stores, auctions, and equipment swap meets. Refreshments and cookies are served. Beer can be obtained from the licenced premises below the meeting hall. At the November social the Club conducts its Annual General Meeting.

Details of these events and other special activities are announced in advance in the monthly club newsletter and on the club website.

Membership

The BCMC has several categories of membership: active, associate, junior, life, senior, and honorary. Persons interested in joining the Club can obtain further information by phoning the Membership Chair (604-268-9502) or by attending a club social event. Club social events and trips are open to non-members as well as members. The Membership Chair can also be contacted by email:

info@bcmc.ca



as well as mountaineering challenges (photo - K. Griffin),

Library and Publications

The Club maintains a library with an extensive collection of books, photographs, guide-

books, and periodicals on mountaineering. It is open to use by members and details about the collection and its use can be obtained by contacting the Club executive.

The Club produces ten issues per year of its newsletter. The newsletter contains club news, trip schedules, access information, trip reports and other news. This club journal, the B.C. Mountaineer, is produced every two years and contains accounts of recent climbs, camps, expeditions, photographs and other material.



and aesthetics of mountain scenes (photo - J. Borchardt collection),

Huts and Shelters

There are five BCMC huts, four of which are unlocked. All are open to the public. Shelters located in Garibaldi Park have been donated to B.C. Parks and the people of British Columbia.

Club shelters and their general locations are:

HIMMELSBACH:	Russet Lake, Garibaldi Park
MOUNTAIN LAKE:	Mount Sheer, Britannia Beach
NORTHCREEK:	North Creek, Lillooet Valley
PLUMMER:	Claw Ridge, Mt. Waddington
WEDGEMOUNT:	Wedgemount Lake, Garibaldi Park.

Conservation Guidelines

In order to conserve the alpine environment, Club trips try to adhere to the following guidelines:

1. Pack out all garbage.
2. Where pit toilets are not provided, select a screened spot at least 50 metres from any

water and dig a hole 15 to 30 centimetres deep. Cover the hole with soil and ground cover. Keep water sources free of contamination.

3. Alpine life, whether flora or fauna, is fragile and not in abundance. Plants and animals are not killed unless required in an emergency.
4. Stay on trails and do not cut corners on trail switchbacks to avoid erosion.
5. Light small campfires. Use only dead wood and remove traces of the fire site. Ensure that fires are properly extinguished. Do not light fires in alpine areas or in areas where fires are not allowed.
6. Camp in forests or on non-vegetated areas to avoid damage to meadows, lakeshores and stream banks.



and just relaxing away from urban stresses (photo above - G. Trotter, photo below - S. Tate).



1. FOOD FOR THOUGHT

The Tyrol Declaration on Best Practice in Mountain Sports

This extract from the Tyrol Declaration is reproduced by permission, from the Journal of the UIAA Online (<http://journal.uiaa.ch>)

The Tyrol Declaration on Best Practice in Mountain Sports, passed by the conference on the Future of Mountain Sports in Innsbruck on September 8, 2002, contains a set of values and maxims to provide guidance on best practice in mountain sports. These are not rules or detailed instructions, rather they:

1. Define today's fundamental values in mountain sports
2. Contain principles and standards of conduct
3. Formulate the ethical criteria for decision-making in uncertain situations
4. Present the ethical principles by which the public can judge mountain sports
5. Introduce beginners to the values and moral principles of their sport.

It is the aim of the Tyrol Declaration to help realize the innate potential of mountain sports for recreation and personal growth as well as for promoting social development, cultural understanding and environmental awareness. To this end, the Tyrol Declaration picks up on the traditional unwritten values and codes of conduct inherent in the sport and expands on them to meet the demands of our times. The fundamental values, on which the Tyrol Declaration is based, hold true for all individuals engaged in mountain sports worldwide - whether they be hikers and trekkers, sport climbers, or mountaineers seeking to push their limits at high altitudes. Even if some of the guidelines for conduct are of relevance for only a small elite, a lot of the proposals formulated in the Tyrol Declaration are addressed to the mountain sports community as a whole.

The Tyrol Declaration is an appeal to:

- Accept the risks and assume responsibility
- Balance your goals with your skills and equipment

- Play by fair means and report honestly
- Strive for best practice and never stop learning
- Be tolerant, considerate and help each other
- Protect the wild and natural character of mountains and cliffs
- Support local communities and their sustainable development.

The Tyrol Declaration is based on the following hierarchy of values:

- **Human dignity** - the premise that human beings are born free and equal in dignity and rights and should treat one another in the spirit of brotherhood. Particular attention should be given to equal rights of men and women.
- **Life, liberty and happiness** - as inalienable human rights and with a special responsibility in mountain sports to help protect the rights of communities in mountain areas.
- Intactness of nature - as a commitment to secure the ecological value and natural characteristics of mountains and cliffs worldwide. This includes the protection of endangered species of flora and fauna, their ecosystems and the landscape.
- **Solidarity** - as an opportunity through participation in mountain sports to promote teamwork, cooperation and understanding and overcome barriers due to gender, age, nationality, level of ability, social or ethnic origin, religion or belief.
- **Self-actualization** - as a chance through participation in mountain sports to make meaningful progress towards important goals and achieve personal fulfillment.
- **Truth** - as recognition that in mountain sports honesty is essential to evaluate accomplishments. If arbitrariness replaces truth, it becomes impossible to assess performance in climbing.
- **Excellence** - as an opportunity through participation in mountain sports to strive for previously unattained goals and to set higher standards.
- **Adventure** - as recognition that in mountain sports the management of risk through judgment, skills and personal responsibility

is an essential factor. The diversity of mountain sports allows everyone to choose their own adventure, where skills and dangers are in balance.

Maxims and Guidelines of the Tyrol Declaration

Article 1 - Individual Responsibility

MAXIM – Mountaineers and climbers practise their sport in situations where there is risk of accidents and outside help may not be available. With this in mind, they pursue this activity at their own responsibility and are accountable for their own safety. The individual's actions should not endanger those around them nor the environment.

1. We choose our goals according to our own actual skills or those of the team and according to the conditions on the mountains. Refraining from doing the climb should be a valid option.
2. We make sure that we have the proper training for our goal, that we have planned the climb or trip carefully and have gone through the necessary preparations.
3. We make sure we're properly equipped on every trip and know how to use the equipment.

Article 2 - Team Spirit

MAXIM – Members of the team should be prepared to make compromises in order to balance the interests and abilities of all the group.

1. Each member of the team should have regard and take responsibility for the safety of their team members.
2. No team member should be left alone if this risks his/her well-being.

Article 3 - Climbing & Mountaineering Community

MAXIM – We owe every person we meet in the mountains or on the rocks an equal measure of respect. Even in isolated conditions and stressful situations, we should not forget to treat others as we want to be treated ourselves.

1. We do everything we can, not to endanger others and we warn others of potential

dangers.

2. We ensure that no one is discriminated against.
3. As visitors, we respect the local rules.
4. We do not hinder or disturb others more than necessary. We let faster parties pass. We don't occupy routes others are waiting to do.
5. Our reports on climbs truthfully reflect the actual events in detail.

Article 4 - Visiting Foreign Countries

MAXIM – As guests in foreign cultures, we should always conduct ourselves politely and with restraint towards the people there - our hosts. We will respect holy mountains and other sacred places while seeking to benefit and assist local economy and people. Understanding of foreign cultures is part of a complete climbing experience.

1. Always treat the people in your host country with kindness, tolerance and respect.
2. Strictly adhere to any climbing regulations implemented by your host country.
3. It is advisable to read up on the history, society, political structure, art and religion of the country visited before embarking on the trip to enhance our understanding of its people and their environment. In case of political uncertainty, seek official advice.
4. It's wise to develop some basic skills in the language of your host country: forms of greeting, please and thank you, days of the week, time, numbers, etc. We thus contribute to the understanding between cultures.
5. Never pass up an opportunity to share your climbing skills with interested locals. Joint expeditions with climbers from the host country are the best setting for an exchange of experience.
6. At all costs we avoid offending the religious feelings of our hosts. For example, we should not display naked skin in places where it is unacceptable for religious or social reasons. If some expressions of other religions are beyond our comprehension, we are tolerant and refrain from passing judgment.
7. We give all possible assistance to local inhabitants in need. An expedition doctor is often in a position to make a decisive difference in the life of an acutely ill person.

8. To benefit the mountain communities economically, we buy regional products, if feasible, and take advantage of local services.
9. We are encouraged to assist local mountain communities by initiating and supporting facilities favoring sustainable development, for example training and educational services or ecologically compatible economic enterprises.

Article 5 - Responsibilities of Mountain Guides and other Leaders

MAXIM - Professional mountain guides, other leaders and group members should each understand their respective roles and respect the freedoms and rights of other groups and individuals. In order to be prepared guides, leaders and group members should understand the demands, hazards and risks of the objective, have the necessary skills, experience and correct equipment, and check the weather and conditions.

1. The guide or leader informs the client or group about the risk inherent in a climb and the current danger level and if they are suitably experienced involves them in the decision-making process.
2. The selected route should relate to the skill and experience of the client or group in order to ensure it is an enjoyable and developmental experience.
3. If necessary the guide or leader points out the limits of his or her own ability and where appropriate refers clients or groups to more capable colleagues. It is the responsibility of clients and group members to point out if they believe a risk or hazard is too great and that retreat or alternative options should be followed.
4. In circumstances such as extreme climbs and high altitude ascents, guides and leaders should carefully brief their clients and groups to ensure everyone is fully aware of the limits of support that guides and leaders can provide.
5. Local guides inform visiting colleagues about the distinctive features of their area and the current conditions.

Article 6 - Emergencies, Dying and Death

MAXIM – To be prepared for emergencies and situations involving serious accidents and death all participants in mountain sports should clearly understand the risks and hazards and the need to have appropriate skills, knowledge and equipment. All participants need to be ready to help others in the event of an emergency or accident and also be ready to face the consequences of a tragedy.

1. Helping someone in trouble has absolute priority over reaching goals we set for ourselves in the mountains. Saving a life or reducing damage to an injured person's health is far more valuable than the hardest of first ascents.
2. In an emergency, if outside assistance is not available and we are in a position to help, we should be prepared to give all the support we can to persons in trouble as far as is feasible without endangering ourselves.
3. Someone who is seriously injured or dying should be made as comfortable as possible and offered life preserving support.
4. In a remote area, if it is not possible to recover a body, the location should be recorded as accurately as possible with any indications as to the identity of the deceased.
5. Personal possessions, such as camera, diary, notebook, photographs, letters and other personal artifacts should be safeguarded for, and delivered to, the bereaved.
6. Under no circumstances may pictures of the deceased be published without prior consent of the family.

Article 7 - Access and Conservation

MAXIM – We believe that freedom of access to mountains and cliffs in a responsible manner is a fundamental right. We should always practise our activities in an environmentally sensitive way and be proactive in preserving nature. We respect access restrictions and regulations agreed by climbers with nature conservation organizations and authorities.

1. We respect the measures to preserve cliff and mountain environments and the wildlife

they support and we encourage our fellow climbers to do likewise. By avoiding noise, we strive to reduce disturbing wildlife to a minimum.

2. If possible, we approach our destination using public transportation or car pools in order to minimize traffic on the roads.
3. In order to avoid erosion and not to disturb wildlife, we stay on trails during approaches and descents and, in the wilderness, pick out the most eco-compatible route.
4. During the breeding and nesting periods of cliff dwelling species we respect seasonal access restrictions. As soon as we learn about any breeding activity, we should pass on this knowledge to fellow climbers and ensure that they stay away from the nesting area.
5. During first ascents, we are careful not to endanger the biotopes of rare species of plants and animals. In equipping and redeveloping routes, we should take all precautions to minimize their environmental impact.
6. The broad implications of popularizing areas through retro-bolting should be carefully considered. Increased numbers may cause access problems.
7. We minimize rock damage by using the least detrimental protection technique.
8. Not only do we carry our own garbage back to civilization, but we also pick up any rubbish left by others.
9. In the absence of sanitary installations, we keep an adequate distance from homes, camp sites, creeks, rivers or lakes while defecating, and take all the necessary measures to avoid damage to the ecosystem. We refrain from offending other people's aesthetic feelings. In highly frequented areas with a low level of biological activity, climbers take the trouble to pack out their feces.
10. We keep the campsite clean, avoiding waste as much as possible or dispose of our rubbish adequately. All climbing material - fixed ropes, tents and oxygen bottles - must be removed from the mountain.
11. We keep energy consumption to a minimum. Especially in countries with a wood shortage,

we refrain from action that could contribute to the further decline of forests. In countries with endangered forests, we need to carry adequate fuel to prepare food for all participants in an expedition.

12. Helicopter tourism should be minimized where it is detrimental to nature or culture.
13. In conflicts over access issues, landowners, authorities and associations should negotiate to find solutions satisfactory to all.
14. We take an active part in the implementation of these regulations, especially by publicizing them and establishing the necessary infrastructure.
15. Together with the mountaineering associations and other conservation groups we are proactive on the political level in protecting natural habitats and the environment.

Article 8 - Style

MAXIM –The quality of the experience and how we solve a problem is more important than whether we solve it. We strive to leave no trace.

1. We aim to preserve the original character of all climbs, most especially those with historical significance. This means that climbers should not increase fixed protection on existing routes. The exception is when there is a local consensus - including agreement from the first ascensionists - to change the level of fixed protection by placing new gear or removing existing gear.
2. We respect the diversity of regional traditions and will not try to impose our point of view upon other climbing cultures - nor will we accept their ways imposed upon ours.
3. Rock and mountains are a limited resource for adventure that must be shared by climbers with many interests and over many generations to come. We realize that future generations will need to find their own NEW adventures within this limited resource. We try to develop crags or mountains in a way that doesn't steal opportunity from the future.
4. Within a region where bolts are accepted, it is desirable to keep routes, sections of cliffs, or entire cliffs free of bolts in order to preserve a

- refuge for adventure and to show respect for diverse climbing interests.
5. Naturally protected routes can be just as fun and safe for recreational climbers as bolted routes. Most climbers can learn to place safe natural protection and should be educated to the fact that this provides additional adventure and a rich and natural experience with comparable safety, once the techniques have been learned.
 6. In cases of conflicting interest groups, climbers should resolve their differences through dialogue and negotiation to avoid access being threatened.
 7. Commercial pressures should never influence the climbing ethics of a person or a region.
 8. Good style on big mountains implies not using fixed ropes, performance-enhancing drugs, or bottled oxygen.

Article 9 - First Ascents

MAXIM – The first ascent of a route or a mountain is a creative act. It should be done in at least as good a style as the traditions of the region and show responsibility toward the local climbing community and the needs of future climbers.

1. First ascents should be environmentally sound and compatible with local regulations, the wishes of landowners, and the spiritual values of the local population.
2. We will not deface the rock by chopping or adding holds.
3. In alpine areas, first ascents should be done exclusively on lead (no prefixing from above).
4. After giving full respect to local traditions, it is up to the first ascensionist to determine the level of fixed protection on their route (taking into account the suggestions in Article 8).
5. In areas designated as wilderness or natural reserves by land managers or the local access committee, bolts should be limited to an absolute minimum to preserve access.
6. Drilling holes and placing fixed gear during the first ascent of aid climbs should be kept to a bare minimum (bolts should be avoided even on belay anchors unless absolutely necessary).

7. Adventure routes should be left as natural as possible, relying on removable protection whenever it is available and using bolts only when necessary and always subject to local traditions.
8. The independent character of adjacent routes must not be compromised.
9. When reporting first ascents, it is important to report the details as accurately as possible. A climber's honesty and integrity will be assumed unless there is compromising evidence.
10. High-altitude mountains are a limited resource. We especially encourage climbers to use the best style.

Article 10 - Sponsorship, Advertising and Public Relations

MAXIM – The cooperation between sponsors and athletes must be a professional relationship that serves the best interests of mountain sports. It is the responsibility of the mountain sports community in all its aspects to educate and inform both media and public in a proactive manner.

1. Mutual understanding between sponsor and athlete is necessary to define common goals. The many facets of mountain sports require clear identification of the specific expertise of both athlete and sponsor to maximize opportunities.
2. To maintain and improve their level of performance, climbers are dependent on continuous support from their sponsors. For this reason it is important that the sponsors keep backing their partners even after a series of failures. Under no circumstances may the sponsor pressure the climber into performing.
3. To establish a permanent presence in all media, clear channels of communication must be organized and maintained.
4. Climbers should take pains to report their activities realistically. An accurate account enhances not only the credibility of the climber, but also the reputation of the sport.
5. The athlete is ultimately responsible for representing to sponsor and media the

ethics, style, and social and environmental responsibility stated in the Tyrol Declaration.

“The Changes, They Are a Coming”

by H. Price

If you are over fifty, as I am, the world you knew as a child is gone. Wherever you live there are more people, more houses, more cars. Not only are there more of us but we expect to own more things than we did fifty years ago - things that were unheard of a hundred years ago, like electronic gadgets, plastic wrapped anything, flush toilets and about half the chemicals currently produced. Probably through our own doing, we are witnessing a dramatic shift in the world around us. This kind of global change, both in degree and rapidity, is unheard of in our history. Changes, usually catastrophic, have happened locally. Technological changes with huge social impacts have occurred. But we have never witnessed global changes to our planet's ecosystem on a scale we are beginning to see around us now.

The fact that this planet is physically rapidly changing cannot be open for dispute. We are told, and I do not doubt it, that most of the change we have brought upon ourselves. The world population growth is exponential. The average world temperature is as high as has been recorded and is expected to get even higher. The skies above us do not shield us from solar radiation as they once did

At some point in the past we exceeded the ability of the planet to naturally cleanse itself of the changes we have made and restore the environment to it's prior state. Some of the changes may be a part of some “natural cycle”, some we have introduced. At this point it does not really matter. Things have changed. Things are changing faster

Can we reverse these changes? Almost certainly no. The conditions that brought us to the present state haven't changed. Our biologic imperatives and our social structures will never adapt quickly enough for this rate of change. Intellectually, as individuals, we may understand the requirements to reverse these conditions but culturally and politically doing what is required is impossible.

Can we slow these changes? Probably not. The actions required to slow change probably are not feasible. Global interests often are in direct conflict with local interests. When long-term interests conflict with immediate need, long-term interests lose almost every time.

We have to get past the moral concepts of “good” and “bad” when thinking about environmental change. Whether you view this as a catastrophe or not depends on the effect it has on you. Species that cannot adapt will perish. That aspect of the Darwin Theory is almost certainly true. It applied to the dinosaurs. It will apply to the creatures currently residing on this planet, including us

As appealing as that point of view is, I think we should turn away from attempts at slowing and reversing of this change. That war was over a long time ago, probably before we knew it had begun. It was lost when Henry Ford invented the production line. It probably was lost when the steam engine was invented. It might have been lost when we evolved as tool makers. It doesn't matter when. It is over.

So what is likely to happen? Scientists have been speculating and hypothesizing about what is going to happen for years. The scenario that most appeals to me is the following:

The warming is most apparent at the extremes. Therefore the polar ice caps and the glaciers will show the most dramatic affects by accelerating melting. The ocean level will rise and the oceans will cool. Because of this physical change - larger cooler oceans - the warming trend will be short lived (a couple of decades to a couple of lifetimes). At some point warming will rapidly, by geologic measurements, change to cooling and there will come another ice age.

So what about us? We who love the mountain wilderness as it is and was? In our lifetimes the winters will be warmer and wetter and the glaciers and snowfields will recede but some part will remain. Streams you counted on for water might not be there. The most notable change will be a loss of some species of plants and animals and a gain of others. If you view a photograph of the Squamish Chief in 1950 and then drive by it today you will notice it has transformed from almost completely bare rock to about 25-30 percent trees. Short time, big change and it is not going to stop.

The scenario, in locally understandable terms, might be: in Vancouver it gets warmer and wetter in the winter and dryer in the summer. Any time of year you don't go out without your sun cream. For our grandchildren, the suburb of Richmond is now well below sea level and Stanley Park is an island, but they can grow kiwi fruit in the backyard. Their great-grandchildren exclaim, "My there is a lot of snow on the North Shore mountains this year and it didn't hardly melt last year at all." Their great-grandchildren, from California, "The glaciers continue to grow southward." Crampon sales explode.

Could this happen? Maybe. Is something going to happen? Without a doubt, it is already happening.

So what can we do about it, if anything? Well, we can plan for the foreseeable future. Nationally, we can give our best guess about foreign policy, defense, energy, housing, food and water supplies and form policies and contingency plans. Regionally, we can support required changes in building codes, agriculture, social services, and services structures (power, water, sewage, etc.). Locally, we can plan services to meet changing needs.

Unfortunately, if history is any guide, what will happen will be squabbling, denial, and conflicting personal agendas followed by crisis management and mismanagement. In short – muddling through. That is how we arrived at this juncture in the first place. Lost in the process will be what we consider wilderness; what will be there is anybody's guess.

Climbing and the Greater Picture

by Anders Ourom

Early one lovely autumn morning a year or two ago, Fred Beckey called, quite early. I know him slightly, but have never climbed with him, or even talked with him about going climbing. It was a bit of a surprise when he called. Fred must have been getting near the bottom of his very long contact list. Fred had an idea for a new route, and wanted to go climb it. An ice climb, north of Vancouver. It would be in good condition, but we should go right away, in case someone else got there first, or the weather changed.

Fred was then in his late 70s, and his outstanding climbing record extended for more than 60 years. It seems fair to say that climbing has defined Fred's life, his values, and his world view. I was flattered that he wanted me to go climbing with him, and thought it might be a unique experience. I told Fred I needed to check my calendar, and try to change a few things, and could I call him back.

I turned off the unneeded alarm, did the usual morning things, then checked messages and e-mail. Cathy had called while I was busy. She told me terrible things were happening. It was 11th September 2001. Thousands had died in grotesque events in the eastern U.S. All aircraft over the U.S.A. and Canada had been grounded. Lacking a television, I went to my parents to watch, and to tell my father, who's hard of hearing.

Later, stunned by what I'd seen and heard, I went home. Fred called again, with much the same pitch, adding that the climb was in the Monarch area, and reiterating that the pilot was ready to go. I politely begged off. I had some commitments, which couldn't easily be changed. Perhaps I missed a unique opportunity. But I didn't really feel like going anyway. It didn't seem quite as important. And whether Fred knew or not, it was clear we weren't going to be flying anywhere anytime soon.

My guess is that the peripatetic Fred simply didn't know what had happened, although by then there were few who hadn't heard. I didn't ask. Even if Fred had heard, he may not have considered it important, or relevant. Dreadful things had happened, as they sometimes do, but he wasn't directly affected, and there wasn't anything he could do about it. His priority, perhaps obsession, was climbing, and in a long life he had seen enough of the world to know what was important to him.

Climbers often lack perspective of how climbing fits in the larger picture. They know it must mesh with basic human needs, such as food, shelter, family, school and work. Some think about how climbing fits in the human and natural environments, and a few consider what its true value is. We don't always appreciate how fortunate we are to have the opportunities we have, or think as much as we should about the larger picture.

2. OVERSEAS AND FAR AWAY

A Traverse of the Bergell Mountains

27 June – 3 July 2003

by Silke Gumplinger

The Bergell mountain chain has some of the best rock found anywhere in the European Alps and is an el Dorado for rock climbers and mountaineers alike. This is a unique area of granite horns and spires, jutting up between rugged glaciers, reminiscent of the Bugaboos in British Columbia. Sheer, smooth faces, soaring ridgelines and buttresses are typical features. These peaks lie in a quiet part of Switzerland just southwest of the Engadine valley and the Bernina. The range is accessible on the Swiss side from the Val Bregaglia (Bergell) between Maloja [1817m] and Chiavenna [330m], the smallest of the Italian speaking southern valleys of the Canton Graubünden. The gorgeous lateral valleys, Val Forno, Val Albigna, and Val Bondasca, lead directly into the Bergell Mountains.

The romantic little village of Soglio [1088m] is a well-known tourist attraction. It is perched on a sunny terraced plateau high above the Val

Bregaglia and offers a magnificent view into the Val Bondasca and the Bergell Mountains. The village is famous for its almost completely preserved original 17th century architecture and for growing chestnuts. Below Soglio is Europe's largest chestnut grove, here called Piazza where, in autumn, village elders go to harvest and dry the nuts. Magic scenes of bluish smoke rising from the "cascine" (small cottages) amongst the branches of the tall and ancient trees have inspired artists and novelists over the centuries. The painter Giovanni Segantini called this place "Soglio, the soglia (threshold) of Paradise".

Friday - After some last minute grocery shopping in Soglio we returned to Bondo [823m] at the mouth of the Bondasca valley. This eyrie of a hamlet is equally picturesque with its narrow cobblestone alleys lined with close-set buildings of stone and cleft wood and with stone-slab covered roofs. We set off to the Swiss Alpine Club cabin Sasc Furä [1904m] around 5:30 pm. Our guidebook predicted 2½ hours for the climb.

Walking hard with our packs, we soon started to sweat profusely in the hot afternoon sun. Tasty wild strawberries along the wayside cheered us up until Peter got tired of walking the



Above Soglio are (from right to left) the Piz Badile, Pizzo Cengalo, the Bonasca Glacier, and the jagged Sciora group. Photo -P. Gumplinger.

switchbacks of the sweltering road and found us a little bushwhacking next to the roaring Bondasca torrent. We arrived at the shady trailhead hoping the worst part was over, when what started next is best described as a Grouse Grind in high alpine settings. We were tempted to complain about our heavy packs, which were of course not nearly as heavy as in BC - no tent, sleeping bag, stove and no other camping gear. But Peter was carrying a 60m, 11mm climbing rope up the mountain doubting whether we would ever need to use it since we lacked the hardware for doing technical routes.

We reached the cabin well after dinnertime at around 8:30 pm. Further into the trip we realized that the time predictions of our guidebook were always very optimistic. After a simple spaghetti dinner we socialized with the only other party in the cabin and learned that they planned to climb the famous Piz Badile [3305m] North Ridge. It is a classic climb and said to be one of the best, if not the best granite climb in the Alps. This very long climb follows a pure, clean line almost 1000 meters to the summit. I would have loved to climb Piz Badile but we had planned for a one-week traverse, not for a rock climb, and had left climbing shoes and gear behind in Canada.

Saturday - Our next destination was the same cabin as for the Piz Badile party. We followed their ascent route to the base of the North Ridge, crossing fields of alpine roses in full bloom and scrambling over a few granite slabs. From our high point we had an impressive view of the North Ridge and into the huge north faces of the Sciora Group - Piz Badile, Pizzi Gemelli and Pizzo Cengalo. We then followed a route called "Viale" through rock at first, then alpine flowers, and eventually across snowfields and moraines until we gained the tongue of the Bondasca glacier. Ascending this glacier we zigzagged through the many and surprisingly open crevasses and made good use of our heavy rope. The final 50m, up into the notch of what is the Passo di Bondo, was a rock climb (low 5th class) on rather loose rock. We were now in complete white out, so instead of climbing nearby Cima della Bondasca, we had a very late lunch in the Bivouac Ronconi [3168m]. This metal box had a book dating back to 1963. It was only half full - five entries last year and none

this year. For the Alps this place was certainly remote.



Below the N Face of the Piz Badile with the N Ridge on right skyline. Photo - P. Gumplinger

Down the other side we descended a smaller glacier into Italy, recognizing the first signs of an approaching thunderstorm. We hurried, boot skiing, trying not to get lost among the crevasses, when in a break of clouds we caught a short glimpse of the Rif. Gianetti. The hut was still quite a distance away and the thunderstorm was fast approaching. It started to rain and then hail. The intervals between lightning and thunder became shorter and shorter. Just as we reached the cabin all hell broke loose outside. We made it in the nick of time, ordered "uno mezzo litro di vino rosso" and a big bowl of spaghetti, and listened to the stories of the Piz Badile climbers.

Sunday - The weather was gorgeous. We followed the best part of the Sentiero Roma, a hiking/climbing trail, which traverses the entire

south side of the Bergell mountain range at an altitude between 2300m and 2800m. Our destination was the Rifugio Allievi [2445m], a stiff 7 hours away. We had to cross no fewer than three passes: Passo del Camerozzo [2876m], Ps Qualido [2647m], and Ps dell Averta [2585m] with steep ascents and descents on either side. Hand-chains protected the rock climbing and scrambling sections. After the mammoth tour the previous day, this part appeared to us much like a rest day. We arrived at the cabin early in the afternoon and had time to wash our socks in a nearby waterfall (this was very necessary), enjoy the sun and watch the marmots. The only other people in the cabin were two German climbers, busy with multi-pitch technical routes on the nearby peaks.

Monday - The day brought sunshine again. We decided that it was time for a real summit and enough with just traversing around the mountains. This section of the Sentiero Roma to the Rifugio Ponti [2559m] was predicted to be 7½ hours across another three passes: Ps Val Torrone [2510m], Ps di Cameraccio [2954m] and Bocchetta Roma [2898m]. To this we added the climb of Monte Sissone [3330m], a 3 1/2h return from the trail. On the south side the ascent led over boulder and snowfields to the base of the SW ridge. This ridge was a fourth class scramble. The book promised us a fantastic view from the summit, but as soon as we reached it, clouds closed in around us. Back down where we had stashed the packs we now continued along the least appealing section of the Sentiero – forever across talus, scree, big boulders and moraines. We finally crossed the last pass and spotted the cabin in the distance. Peter started to complain about ‘poor route selection’. Following many red paint markers we were led to traverse across yet another enormous boulder field. The cabin custodian and his children came out to greet us. We were his only guests. He didn’t speak German, or English, but we knew enough Italian: “uno mezzo litro di vino rosso - spaghetti Napoli - prego”.

Tuesday - Where was the sun today? Nothing but low clouds - whiteout! The weather forecast predicted bad weather throughout the day. We had

to change our plans. Instead of climbing Monte Disgrazia [3678m], Bergell’s highest mountain, up the standard route, which is also a superb ski mountaineering challenge in early spring, we decided to hike out to the town of Chiesa. The trek was over the Passo di Corna Rossa with Rifugio Desio [2836m], now at the edge of our excellent Swiss map. After more talus and boot skiing we reached a beautiful valley with a waterfall, beds of alpine roses and the first larch trees. Descending further we found meadows full of alpine flowers including many orchids. We passed the cabin Rif. Bosio [2086m], which the guidebook describes as being in a paradise like setting, situated at tree line on top of a small hill at the corner of a flat valley, close by some huge boulders, with a lovely creek flowing through it all.

Further along we came across several huts placed in the middle of a lush pasture. These are used for summer herding and cheese production. Walls and roofing were made from cut stone and stone shingles. We eventually followed an excellent pathway that was part of the Valmalenco High Route. It traversed high above the valley along forested slopes. From time to time we passed an Alp, a quarry, or a clearing. After almost two hours from the Bosio cabin, we became suspicious because we were told Bosio-Chiesa was going to be only a 2 hr walk. The signs read 30min to the next Alp, and another 40min to the next one after that, and so on. Finally, and after it started to rain in earnest, we took one of the possible turns downhill and were very happy when a church tower appeared through the trees, now almost 4 hr after we had left the Bosio cabin.

Looking at a sketch in a tourist pamphlet, which was given to us at one of the cabins, we realized that this was Primolo, a small mountain village about 400 vertical meters above Chiesa. It was raining and we were thoroughly tired, so we were looking for the next best place to get out of the elements. We found the local pub, or bar, also the village centre. No sooner had we ordered our “mezzo litro of vino rosso” than a heavy thunderstorm and downpour started outside and the rain turned into hail. So, Primolo it was for the night! We found a decent room in one of the two

Albergos, showered, changed and treated ourselves to a restaurant dinner.

Wednesday - Not a cloud in the sky. We were admiring the gorgeous view from our balcony. Only two days were left in our itinerary. We had to get back to Switzerland and back to our car. Not thinking, we had left our passports in the glove compartment. We were in Italy now and had to get back to Switzerland by crossing a high mountain pass on foot and undetected by the Swiss authorities. Only later we learned that above 2500m even the bureaucratic Swiss allow you to cross the border without showing a passport. But first we had to get to Chiesa and from there by post bus to Chiareggio. The road from Chiesa to Chiareggio is so narrow and windy that the bus needs the full width of the road, with no room for oncoming traffic. The drive was an adventure in itself. Chiareggio is a beautiful mountain village. Here we stocked up our supplies of fresh cheese and Bündner Fleisch (meat). The hike up was very scenic with beautiful views of the surrounding mountains and glaciers. We passed several alps and flowery meadows and then the trail got steeper and rockier. Higher up we entered a charming valley with a creek and a meadow, the Val Bona. Beyond was the Sella del Forno [2768m] pass. We were back in Switzerland!

We climbed Monte del Forno [3214m] from the pass. The final climb led up a chimney, which was rated as 4th class. It looked easier from below than it was, so we were not too surprised to find a belay station with a rope left behind for rappelling. This was of no use to us because we had left everything behind at the pass. We had no choice but to down climb that thing again. In the end, this turned out to be less scary than expected. We arrived at the Cabin del Forno [2574m] in half an hour from the pass. Two other parties were there (we hadn't seen anybody the whole day) but no cabin warden. The cabin was still officially closed; only the 'winter room' was open. However, in the Alps, winter room means a fully furnished kitchen, a stove for heating and cooking, and a sleeping room. The only difference is that you have to cook your spaghetti yourself.

Thursday - This was to be our last climbing day. The Cab del Forno sits above the Vadrec del

Forno (Forno Glacier). We crossed it and started to climb up to the Pass da Casnil [2941m] over moraine debris, boulders and later snow. We were caught by a thunder- and snowstorm just before the pass, making it impossible to proceed. Hiding behind a rock we sat out the storm, which was raging all around us. After a while we were able to cross the pass and hike down the other side into the Val d'Albigna. At the Cabin da l'Albigna the decision was made to use the little cable car of the funicular down to the Val Bregaglia and catch the post bus back to Bondo and our car. The second option would have been another pass and a descent via the Sciara Cabin directly down to Bondo. This was out of question because of yet another downpour that started as soon as we had reached the cable car.



Silke on the summit of Monte del Forno. Photo - P. Gumplinger.

We spent the rest of the day driving narrow roads, and crossing over windy passes, the highest being the Stilsfer Joch [2758m] in the Italian region of South Tyrol. This famous drive has no less than 48 tornantes (hairpin turns) on either side. The day ended in a rustic guesthouse in the mountain village of Stilfs, a hot shower and a five-course gourmet dinner.

Climbing Austria's Highest Mountain August, 2003 by Silke Gumplinger

At 3798 m, the Großglockner is Austria's highest mountain, and climbing it was going to be the highlight of my three months in Europe during the summer of 2003. The idea was born in the Thüringer Hütte, a German Alpine Club (DAV)

cabin in the Hohen Tauern Mountains of Austria. That's where I learned about a club trip of the DAV Munich section to climb Großglockner via its SW ridge, the famed "Stüdlgrat", later in August. The Stüdlgrat is a classic among the high alpine ridge climbs in the Alps. A vertical rise of 550 meters and climbing pitches between 2 and 3+ (UIAA) it leads directly to the summit of the Großglockner. The route can become very tricky when the rock is icy, and is often underestimated.

I had two months to get in shape for the climb. After a weeklong traverse in the Bergell Mountains of Switzerland, I visited the Göschiner Alp area, a beautiful mountain valley with a nice campsite and countless multi-pitch alpine climbs accessible in a day. The final test was a climb of the Linnardspitze via the SE ridge. This peak is the highest mountain of the Silvretta Group, a famous ski touring area in winter.

Thus prepared, I met with my DAV climbing party in Munich. In the end, there were only four of us: my friends Uwe and Evi, both with BCMC experience, Kerstin and I. Leaving Munich early Saturday morning, we drove to the village of Kals am Großglockner in Austria. From there a toll road led to the alpine restaurant Lucknerhaus (1984m). Following a well-traveled hiking trail we ascended the Ködnitztal valley. Our first stop was the alpine cabin Lucknerhütte (2227m). From there, the trail took us in 2 1/2 hours to our final destination for the day, the Alpine Club cabin Stüdlhütte at 2801 m. It was a large cabin packed with more than one hundred people, the majority of whom were Großglockner aspirants. It is chronically overcrowded during the high season, the worst time being the weekends in August, precisely when we were there. Fortunately for us, we had made reservations well in advance and did not have to worry about not getting in.



The Stüdlhütte. Photo - S. Gumplinger.

The weather was gorgeous. While we waited for dinner to be served, we enjoyed the patio, relishing the views, a cold beer and the afternoon sun. Everywhere around us were piled ropes, climbing gear and boots drying in the sun from climbing parties which had either just returned from the mountain or had arrived for a summit bid the next morning. Dinner was a delicious buffet. Most people took it outside on the deck for two reasons: to enjoy the sunshine, but mostly, to escape the crowded guest room. Expecting chaos in the morning with everybody getting up for the 5.30am breakfast, we decided to eat our own meal even more at the crack of dawn at 4.30am, and depart well before everyone else – except for some 20+ other people who had the same idea.



The Grossglockner with the Stüdelgrat on the left skyline. Photo - S. Gumplinger.

We climbed in the light of our headlamps until we gained a glacier. There, we roped up, got our ice axes and crampons out and ascended toward a notch in the ridge called "Luisenscharte" at 3264m from where we were able to access the SW ridge. While we were changing from glacier to rock climbing gear, we enjoyed a magnificent sunrise. We split into two rope teams and started climbing together on a short rope with one or two pieces of protection between each other. The terrain varied between easy scrambling and lower 5th class climbing. Fixed bolts were present in the more difficult or exposed sections. The equipment we needed were 3-5 quick draws, several long slings, some karabiners, harness, helmet and rope. It was fun to climb the excellent rock, initially over some blocks and through a chimney to the

“Frühstücksplatz” (breakfast place) at 3507m. As the name suggests, we had a good rest there and continued on over slabs and small rock bands. The crux, 3+ (UIAA), was an exposed slab where we set up a belay on two excellent bolts. We reached the summit behind two mountain guides and their clients – the third party on the summit that morning with many more to come. With a warm sun and no wind we were sitting on the summit each wearing only a light fleece jacket. Another heat record of 40° C was broken that day down in the valley.



Silke on the Studelgrat. Photo - S. Gumplinger collection.

After an hour on the summit and several summit photos, we started our descent down the easy way - the “Normalweg”. Right away there was a bottleneck in the form of a knife-edge ridge traverse from the Großglockner to the Kleinglockner. Everybody who climbs on this route has to traverse this ridge, and so does everyone

on the way down, regardless of which of the many other routes they have climbed to the summit. We managed to avoid the long wait for our turn at the ridge by rappelling down a short vertical section. We then zigzagged, possible only without a rope, around the many parties who were struggling on their way up. Metal posts along the ridge make it easy to set up belay stations. The next bottleneck was a 40° ice slope. This is the infamous “Glocknerleitl”. Ice was coming down continuously from parties above. We were glad to have had helmets. Another good thing was that we had two 50m ropes along so we could tie them together and rappel the entire first and steepest section, always looking up and jumping out of the way of more falling ice, rock, or even climbers!



Traffic on the Normalweg descent route.
Photo - S. Gumplinger.

We eventually arrived in one piece and unharmed at the cabin Erzherzog Johann at 3454m. This cabin is also known as the “Adlersruhe” (eagles rest) because it is so high up and perched with an amazing view. It can only

be reached from the valley by crossing a glacier and following a “via ferrata” like trail, bolted and secured with chains and ladders. This was also our way back to the Stüdlhütte for a leisurely lunch on its popular patio. But we had to shoulder our packs twice more, to descend to the next lower cabin, the Lucknerhütte, motivated by promises of Apfelstrudel or Germknödel with vanilla sauce (Austrian specialties). One last great view of our mountain from that cabin’s sunny veranda, then two hours later we were driving back to Munich.

The Mountain of Brightness

by Anne Drummond

It feels like as long as I can remember I have wanted to climb Mt. Kenya, but in reality I think the dream was precipitated by the purchase of Amin, Willetts and Tetley’s book “On God’s Mountain – the story of Mt. Kenya”. The photographs and descriptions of the high moorlands and jagged peaks of the Mt. Kenya massif completely entranced me. However, in the same week that I bought the book I also acquired a puppy. Her soft eyes and energetic antics proceeded to very rapidly distract me from any thoughts of embarking on a new set of extended travels. So what with dogs, the demands of my doctoral thesis, and South Africa’s alienation from the rest of the world, Mt Kenya remained in the realm of daydreams. One thing we can be sure of is that eventually all things will change and so, with the passing years, Mt. Kenya found its way to the top of my “mountain wish list”.

Christine Peckham and Winnie Weber from Cape Town, South Africa and myself and Laura Chapman from Vancouver flew from Cape Town to Nairobi in the first week of September 2003. However, Nairobi in the small hours of a Saturday morning was certainly not part of the rosy daydreams, which had preoccupied me during the months prior to our departure. The airport was dark and dingy and the few airport officials looked even more weary and jet lagged than we felt. The transport that I had arranged from Vancouver was there waiting for us and Leonard and the driver helped extricate us from the horde of hustlers trying to persuade us that we needed our bags

carried 20 m to the vehicle – for a small price off course! The Parkside hotel opposite the Devanjee Gardens hinted at a more salubrious past, and indeed when the sunrise straggled through the morning smog a few hours later, it was clear that Nairobi as a city had once basked in a more glamorous light. Now stone and marble buildings with Victorian facades stand like silent witnesses above the seething streets, where useless traffic lights dangle on lopsided poles and the traffic flow but a reflection of African politics.

Somewhat bleary eyed we ate the first of many unsatisfying white bread and boiled egg breakfasts and then headed out to the airport with Leonard to meet Vancouverites Marsha Ablowitz and Marie-belle Bulmer arriving from Amsterdam. The mini-bus taxi was loaded to the gills with all our mountain gear and we set off for Chogoria – a small town at the base of Mt. Kenya.

Away from the relative affluence of the airport strip the realities of Africa pounced; there was a wasteland of urban sprawl, dirt, litter knee deep, dust, and heat, and unleaded fuel turned the air into a toxic brew that stung our eyes and left throats scratchy. And then in wondrous incongruity amid all this mayhem and filth there were pairs of Maribou storks nesting in the flat topped Acacias which struggle for survival along the main street. The culture shock was almost a physical blow, but soon we were free of the city and barreling along the narrow pot holed road going “hell for leather” down hills and then creeping up the other side. By midday we were exhausted and needed lunch so Leonard took us to a “roadhouse” run by “Marjorie” here we had the first of many large bottles of Tusker beer which in most places were as ubiquitous as the begging hands. Ugale (a corn meal porridge) and a delicious spinach dish satisfied our hunger before we continued into the hill country around Mt Kenya. The green terraced hillsides were a lush and peaceful contrast to the dusty flatlands and streets of Nairobi and we all began to relax. Coffee and tea plantations clothed the hills, flowering Coral trees and purple Jacarandas lent bright splashes of colour to the scene. Africa felt very voluptuous, and life seemed full and rich.

Chogoria, a bustling village straggling along a rutted road, felt quite daunting to our

unaccustomed senses and travel weary minds. At the Transit Hotel we met Stephen Wahome who had organised the guide and porters for the trek. After some unexpected haggling with him over the costs of his services, we had supper and then sorted out our gear and food for the trek. Singing villagers in the street below and the smell of the burning mosquito coil filled the air as we drifted off to sleep in the strangeness of the warm African night.

A damp misty morning greeted us; we breakfasted and began loading up the two ramshackle LandRovers that were to transport us along the forest road to the Bandas, which was the starting point for the Chogoria route on Mt. Kenya. Twenty km later with stiff legs and sore butts we gratefully uncurled from the confines of the truck and started walking. Marsha and Mariebelle went with the gear all the way to the Bandas but the rest of us wanted to walk the last 10 km in order to begin the acclimatization process. Mist and drizzle thwarted all hopes of views of the mountain but we enjoyed the walk, getting to know Sammy our guide and the porters as we walked.

The Bandas are a camp of wooden cabins on bright green lawns set among huge Rosewood trees. These trees had contorted and sculptured trunks with maroon flowers that looked like huge bunches of grapes and were much favoured by the chestnut-winged starlings and the noisy little variable sunbird. We pitched our tents and set about preparing a much needed supper on the verandah of one of the empty huts. The arrival of torrential rainfall and a veritable army of porters who occupied the huts sent us scampering for our tents. Here we lay snug and warm while squall after squall lashed the tent. Sleep was sweet once the rain eased off and we realised that our anxiety over the performance of our new tent was unfounded. Excursions outside the tent during the night necessitated much vigilance due to the presence of grazing Buffalo, as well as the considerable results of their digestive processes!

In the morning our already high spirits soared when we caught a glimpse of the mountain tinged with sunrise glow – we could see why the Kikuyu people who live below the mountain call it “Kirinyaga” - the mountain of brightness. It was

big, very big and far away; we stood in silence and were struck by the hugeness of this adventure. All too soon the clouds claimed the peaks and we set off walking into a soft mist, which after a while did rise and allowed us to appreciate the valley and the strange vegetation. I moved as if in a dream through the landscape of Proteas, giant heathers and bird song and I wanted for nothing.



Gorges valley. Photo - A. Drummond



Lake Michelson. Photo - A. Drummond

We lunched in a clearing at the end of the jeep track and after some discussion decided not to stick with the traditional route to Minto's camp, but take a side valley to Lake Ellis and then on to Mintos camp the next night. The normal route was just too long and involved too much elevation gain for one day. It was a wise decision because we were all feeling the effects of the altitude and the long hours of traveling of the previous days. Despite the increasingly wet mist the diversion to Lake Ellis was quite delightful. As we hiked up the valley we moved into the high Heathlands where the vegetation was dominated by tussocky grass, and giant Lobelias and Senecios loomed through the mist, like furry creatures from another land.

I was feeling quite weak and nauseous by the time we arrived on the shores of Lake Ellis, a feeling I'm sure was shared by most of the others. It was pouring with rain by the time we finished pitching our tents. We rested for a while, then in a brief respite Laura, Winnie and I went for a walk to gain a little more altitude before sleeping low, in an effort to enhance our acclimatization. An hour later we returned drenched and cold. We huddled in our tents and I prepared dinner while Christine and Laura stoically braved the rain to run between tents, delivering soup and then a delicious bowl of pasta and vegetables.

The inability to acquire white gas/benzene in Nairobi meant we were using kerosene in our stoves and kerosene is a dirty fuel with low flammability; so with our stoves not performing very well, every meal was fraught with the fumes of kerosene and frustration. By the first night we had only one functioning stove and thus it was quite a challenge to feed the 6 of us and I was anxious that the last stove would give out on us too.

Again we slept snugly and the morning was bright and clear. The peaks of Mt Kenya seemed a little closer, but still very daunting in their size and ruggedness, as we walked back around the lake and up the valley side to where we met the main Chogoria path. I felt very strong and found a pleasant rhythm in the walking. But it was short lived and by lunch time I was nauseous and weak. Dazed and tired I could barely eat. Frustrated and tearful I could barely appreciate the rock formations, the twisting gorge below and the hints of high rocky summits through the lowering clouds. The afternoon felt hard but it was only an hour or so to Mintos Camp.

It was cold, wet and very gray as we pitched our tents and commenced battle with the stove. The ineffectual yellow flames threatened sanity and the need for a warming drink. But we managed and soon were all warm and dry in our tents. I lay in the tent with a throbbing head and waves of nausea coursing through my body. With eyes closed listening to the rain on the tent, my fears grew. Is this the end of the trek for me? Is this AMS (Acute Mountain Sickness)? Will it get worse in the night? Am I going to be OK? Laura was gentle and reassuring and then went off to



Anne on Mt. Kenya. Photo - A. Drummond collection



Nelion Pk., Mt. Kenya. Photo - A. Drummond



High camp. Photo - A. Drummond

make supper. Supper and a cup of Milo later I was feeling a little better, still weak but hopeful.

That night the tent resembled a medical ward with Laura waking me every two hours or so to check my heart and breathing rate. I developed a horrible headache but no other symptoms of AMS and eventually slept the night out.

Morning brought exquisite views of the mountain – stark golden rock shining as though it was lit from within. It was cold and difficult to get going, the tents were frozen and there was a skin of ice on the tarn. The little cliff chats which had been constant companions at every campsite, were hopping about in the sunny spots with their feathers all fluffed up. By the time we had breakfast and coffee we started feeling the warmth of the sun. Marsha and Marie-belle decided that they would go down and stay at the Bandas for the rest of the week and the four of us decided to stay another night at Mintos camp before going on to the summit. We helped the M & M's pack, shared out food and gear, then waved them and their two porters goodbye. We set off up the valley with daypacks to ascend Simba's col which looks down into the Mackinder valley and would give us another 500m of elevation gain before sleeping low. It was a delightful hike and I felt better and better as the day progressed.

Just beyond Minto's camp we left behind the Heathland with its tall Senecios and Proteas and moved into the highest vegetation zone on the mountain – the Afro-Alpine. Here plants were scarce, only the occasional tall furry leafed *Lobelia* and tiny *Helichrysum* tucked into sheltered crevices could be found. Some unique conditions operate in tropical alpine areas making them perhaps even more rigorous habitats than temperate alpine areas of Europe and North America. The thin dry air at altitude provides no barrier to incoming solar radiation and then heat is lost readily at night, resulting in huge temperature fluctuations. At night moisture in the soil freezes into small needle-like icicles which



Austrian hut, Mt. Kenya. Photo - A. Drummond

pushes soil particles upwards. Then during the day the icicles thaw and the soil particles tumble down. Few seedlings can tolerate this continuous upheaval of the soil and thus very little can grow in this zone, giving rise to what is known as a "solifluction desert".

The views down from our high point were spectacular and made more so by the tendrils of mist which appeared wraith-like from the soaring rock faces of the peaks around us. An auger buzzard with steely black eyes circled low over us; this handsome black and white eagle with its distinctive rufous tail ruled the skies around Mt. Kenya feeding on unwary rodents. The four of us were a happy team as we made supper and prepared for our hike up to the high camp at Austrian hut the next day.

A good sleep brought us to a glorious and much warmer morning. We felt better acclimatized and all walked strongly up the valley and over the col. At the col we looked down the Naro Moru route and gazed up at Tilman, Grigg and Somerfelt peaks; very handsome mountains in their own right, but probably rarely climbed. Beyond the col we were on the north-western side of the massif where a biting wind and lowering temperatures snatched heat away from our labouring bodies, as we picked our way across the rubbly scree slopes up to Tooth Col. Here we passed beneath rock towers and entered a high white, wind blasted world. The only colour was the faded red of the decrepit Austrian Hut and a cluster of other motley huts, huddled in the desert of gray boulders left by the retreating glaciers. We pitched our tent, an exhausting task at this altitude, especially as pegs couldn't penetrate the icy gravel. So we tied the tent to boulders and hoped for a calm windless night. Finally we snuggled into the warm haven of the tent, ate lunch and rested our oxygen starved headache bodies. We read poetry, talked and dozed then later cooked supper and planned our summit day.

A sleepless night followed – I was warm enough, thanks to Laura's wool shirt, but sleep still eluded me – altitude and excitement being a powerful recipe for insomnia. So the 3:45am alarm was welcome. We got going quickly, it was too cold to do otherwise. Dressed in many layers we packed up camp and headed for the hut where we cooked breakfast in the kerosene-laden gloom

amid nervous excitement and playful camaraderie; all smiles and bright eyes glowing in the stove light. Outside it was clear and starbright, we switched on headlamps and stepped out into the dark cold windswept world. Instantly we were each alone in the small pool of light that streamed from our headlamps.

Each step felt like a huge effort in the cold air with so many layers of clothes on and the ground below our feet was a black unknown. As the slope got steeper I become even more locked into the small dark world of my footsteps and laboured breathing. And then the first swathe of sunlight on the wall of Batian released us from the small lonely worlds of our headlamps.

We smiled, grinned and gazed in wonder at the cold but bright world lighting up around us. We scrambled over icy rocks, kicking a few steps in the strange dry powdery snow, then a few moves up a large blocky boulder and we were on the summit. Full of adrenalin and delight we laughed and hugged. It felt like a huge achievement to be there so happily with these fine people.

We gazed in awe at the peaks, valleys and plains spread below us, took a few photos and then with a cold wind nipping exposed flesh we scampered down. We descended a different route down the north face to Simba Col and then back to Mintos camp. Shedding layers as we descended, laughing, delighting in the glorious early morning light, which with bold shadows, lent an element of mystery to the high peaks. Back at Mintos we ate and relaxed briefly before starting down the 23km all the way back to the Bandas. It was easy enough walking and the views expansive under clear skies. But I was tired after a sleepless night and Laura's feet were hurting badly. We lunched at the roadhead, drifting off in the sun before continuing with the last 6km through the thick humid forest. Despite our tiredness the return to the Bandas felt triumphant. Marie-belle had ice-cold beers waiting for us and the porters had stoked the fire for showers. We all lay about on the sun-warmed lawn sharing stories of the last few days.

Morning brought sunshine, coffee and the satisfaction of gazing upon the peak we had climbed. We wandered around in the forest and grassland for a few hours before cramming

ourselves into the rattly LandRover for the long leg-stiffening and butt-aching journey back down to Chogoria. The Transit hotel felt pleasantly familiar and quite luxurious after the week in our tents. Laura and I went down to the village and bought pawpaws and tomatoes, which we devoured with beer up on the roof watching the sunset and listening to the village sounds.

Cathedral Peak (4th) and Eichorn Pinnacle (5.4), Tuolumne Meadows, CA., 20 July 2003

by Rich Pawlowicz

An old and not very unusual story; life divides into "before-the-kids" and "after-the-kids" with a lot fewer mountains after. The rack hangs in my basement, the musty rope beside it. The slightly sweet smell of unused climbing shoes, the dreams, not of the big (or even medium-sized) routes that were always out of my league, but the happy routes. Two on a rope, the mountain landscape surrounding us, snow, rock and ice gleaming in the pale-blue sky, far above our mundane city life.

It's July, and vacation-with-the-inlaws time. A cabin just outside Yosemite Park in California. The Sierras! My wife takes pity on me and puts me in touch with one of her old climbing partners in the Sierra Club Peak Climbing Section. Arun and I discuss options. I've been to the Valley before; it will be baking down there this time of year; the sun beating off the rocky walls and emanating in shimmery waves from the idling tourbuses; the babble of climbers from all over the world queuing up for the easy climbs and dropping gear on each other....no, let's not go to the Valley. Instead, I'm keen on historic Cathedral Peak and the flat-out outrageous Eichorn Pinnacle, high up (over 3300 m) in Tuolumne Meadows. Arun's done them before but is happy to revisit.

A couple of hours drive, up, up into the Meadows, the baking lowland temperatures (even at 7am) slowly moderating. 9:30am and we set off up the trail. A vivid contrast with British Columbia and its trails of fresh moist earth through the dank forest, devils club, slide alder, and rock fuzzed with moss. This is old, old, another world entirely.

A dusty earth packed down around rounded stones. Dry wood, and far higher in the sky than one expects a bright sun beating down. The unmapped and unmarked climbers access route (it must be at least 50 years old); itself well-trodden along a creek, winds through the sparse alpine forest. The smell of the thick gnarled pines around the yellowed grass, and glare of the light. After a few hours we angle off the trail, up the scrubby slope to Cathedral's North Ridge. Loose scree and sand between the stunted bushes. To the left the fabled south-east buttress route, 5.6 climbing for pitch after glorious pitch. Aaahh...but we don't have time today. At least 4 parties already there, the ring of clanking metal, cries back and forth from either end of their ropes, silhouetted against the blue sky. For us a scramble over the ridge crest, then traverse on small ledges cutting through slabs, across, and then up. Weaving back and forth across larger steps, the summit invisible until we attain a narrow windy notch. Even then the route is mysterious, hidden, a 4th class crack around a corner.

The rope comes out, I tie in. Step across on ledges, then up the crack, edging in my floppy running shoes. God, I'm out of practice. I flail on the generous holds, remembering that this very step was climbed first, solo, by John Muir 135 years ago. The rock is gorgeous, a lovely golden granite. The summit itself is flat, although small, and bisected by a crack perfectly suitable for gear. Apparently club trips occasionally put up to a dozen people up there at the same time. Something like stuffing a phone booth or a VW bug I suppose. In the center, the rusty remains of a rap bolt; the latest victim of a longstanding ethics war. "If John Muir didn't need it..." etc. I try to remember the basics of anchor construction. Equalize, equalize, a tangle of linked webbing lying along the crack. Hmmm. I'm sure it will hold, but this is definitely not the most elegant anchor I've ever made.

Suddenly the deserted summit becomes crowded - a soloist topping out, a group of 4 just behind, all coming off the SE buttress route. Arun wants the challenge of coming up ropeless; more power to him. I'm a father; that just isn't an option any more. The responsibility of that weighs me down, but in some ways it also frees me. We

shake hands on the summit, then downclimb to let the others up.



Eichorn Pinnacle. Photo - R. Pawlowicz

Enough time for Eichorn Pinnacle? Arun thinks not, but I don't see why it isn't possible. The weather is as good as it can get. Hours till sunset. The Pinnacle from here looks amazing, a vertical pillar splitting the sky a few hundred meters away to the west. "Let's just go and have a look and then decide", I say, but I want more than a look. There's a tightness in my chest, a hunger and a lust for much more than a look. The classic climbers lie, tricking your partner into commitment - I've been on both sides of it before. How long since I had that feeling last? How long will it be till the next time?

We begin to look around the right side, a slope of blocky granite. Finally see what looks like the route; a diagonal weakness that traverses onto the face to bypass a roof. Hmmm. Arun offers to lead the first pitch and I'm OK with that. Man, it looks steep for 5.4 (Jules Eichorn soloed this in 1932). Suddenly apprehensive but unwilling to

back off now. Arun leads off slowly, disappearing around a corner. In the quiet cool shade I slowly pay out the rope, looking off at peaks far in the distance. A virgin landscape for me. Eventually he sets up a belay, and I follow. The route edges out along a series of ledges, one awkward, then goes up over a bulge past a few pins now worn shiny with use, to a little nook.

2nd pitch is mine, a short (and slightly overhanging) chimney. It feels harder than 5.4, maybe the "correct" route is around the corner? To heck with it - straight up. A few moves, then it's a breeze. Good holds on giant fins and flakes. Ah, what a view. The parched granite domes roll away to all horizons, except to the south where visibility is blotted out by an isolated afternoon rainstorm! Arun comes up. We examine the register; I see Galen Rowell's name. RIP. A few tiny spots of rain drift across the summit, and we hurriedly rig the rappel. Straight down, right to our packs on the starting ledge using the rope stretch. Wow. In contrast to the crowds at the main peak we have been gloriously alone for this sidetrip.



Rappelling off Eichorn. Photo - R. Pawlowicz collection.

We descend the slabs on Cathedral's west side, and back into the woods. A bit of bushwacking finally, a slight echo of the feeling I

love in the BC backcountry, although the travel in this sparse open forest has nothing in common with the dense thickets of home. We soon pick up the wide and well-trodden Muir trail, and then it's a beeline back to the car. Home for dinner!

Bolivia, 2002

by Jeff Rabinovitch

Huayna Potosi

It was obvious as soon as I got out of the taxi at the base of Huayna Potosi that the 1000m we had gained since leaving La Paz 2 hours earlier was affecting me. Although I had no headache, nausea or balance problems, I felt lethargic and walking even a few steps winded me. Ben and I had planned to hike an hour or so above the refugio to camp but I insisted that we stay there for the night and ascend to the high camp (campimento argentino) at 5500m the next day.

Early the next morning we awoke to cool temperatures and clear skies – Perfect for hiking. We packed up and began to make our way up to the high camp. We had read and were told that it was a 4-5 hour hike from 4700m to 5500m. Not a lot of gain but considering the altitude it could be difficult. Well, difficult hardly describes it and from my first steps with my overloaded pack I wondered how I would make it. I thought that my earlier stay at 5000m in the Quimsa Cruz area would help but 2 weeks had passed and I guess I lost that benefit. As well for a couple of days just before leaving for Huayna Potosi I had suffered from some stomach problems and general illness which prevented me from eating very much for about 36 hours. The problems had cleared up quickly but perhaps in combination with my lack of acclimatisation, accounted for my crawling pace.

Finally after 4 hours of much huffing and puffing and after passing the rope off to Ben, who seemed to be incredibly strong, we made it to the first camp, just at the edge of the glacier, at 5100m. There were already about ten tents set up among the rocks, mostly groups with guides and porters for this 'easiest 6000m peak in the world'.

Ben and I set up camp and began dinner preparations but I could not help noticing his

disdain. He made many comments about my slow pace and lack of fitness. I felt that with the extra day we had built into the climb (most groups spend just the one night on the mountain), I would be able to rest, recover and acclimatize. Regardless of my positive attitude Ben remained grimly negative. Overall though I felt happy and relaxed and spent many moments staring at the beautiful, but out of condition, East Face. I was, however, somewhat overwhelmed by the crowded camp area and the piles of tin cans, paper, plastic bags and bottles strewn everywhere.

The next day I felt very good and Ben was insistent that we make our way to the high camp, but I was even more adamant that we stay low, hoping that I would acclimatize better here. The vast majority summit from this camp and many who move up to the 5500m camp suffer from altitude sickness. We stayed but again Ben's mood was negative and very unsupportive.

We were not the only group with problems. A sponsored French ski team camped beside us had difficulties of their own. They had planned to summit via the normal route and then ski down the east face but were plagued with leadership and personality conflicts. While we slept they made their attempt. Two summited but the other two skiers returned early, one having suffered from the severe cold. When the two summitteers returned later a yelling match broke out. Although I did not intervene in their argument I spent some time with Marjo and Sammy who had failed to summit and tried to console Marjo who had felt totally unsupported by her team leader. I pointed out that climbing is about the beauty of the place and the people you are with and that the summit is but icing on the cake. I guess Marjo and I had some common feelings about our respective teams.

Ben continued his rally against me, even at one point telling me that our future as a team depended on my success the next day. I was being tested on this high but totally non-technical peak! Hmmm.

We awoke at midnight and were off and walking by 1:30am. We moved quickly under the clear skies and the nearly full moon, but after only 90 min my pace slowed and I began to get quite cold. Eventually I donned my down parka, goretex

jacket, thick wool mitts and overmitts but by then my pace had really slowed and my feet began to get cold too. When we reached the final 250m high 40-50deg headwall at 5am the effects of being at 5800m hit. I was very cold and had some minor nausea and felt very spent. But we were so close. I decided to give the slope a try. Ben wanted to pitch the way up but I felt that I could not stand in the cold and wait for 15 minutes at a time while he climbed and set up anchors. As well the slope was not overly steep and I was positive that if I proceeded slowly I could make it. Ben chose to unrope. This was fine with me and off I went, albeit slowly.

As I ascended my hands began to thaw and my body warmed slightly, but my feet were still cold. Kick-stepping in crampons on the hard snow was not helping either. I made steady progress but about halfway up feelings of nausea returned. I slowed my pace and took more frequent rests. On the distant horizon the sky turned red then orange and suddenly it was dawn. I could see the top of the slope where the incline lessened and like the sun, my hopes were rising. Ben had taken a break at the bottom, but now, moving quickly I gained my position and moved ahead. My mind was still clear and I had the energy to summit; however, my nausea was worsening. I was down to 3 steps and a rest while I used all my energy holding down the approaching vomit. The 100m to the summit seemed like an ocean away. It was over. The easiest 6000m peak in the world had worn me out.



High on Huayna Potosi. Photo - J. Rabinovitch.

Quickly I descended and waited below the headwall in the sunshine while Ben continued. I was shaking with exhaustion. Ben returned from the summit shortly after and we returned to camp,

where it was our turn for words. I had failed his test. Apparently I was an unfit, unskilled and dangerous mountaineer. He would not climb with me again. All this was strange to me (even though I too had decided the previous day that I did not want to spend any more time with him either), because we had shared the point of view that this mountain would serve as acclimatization only and that however slowly we moved or even whether we summited was moot. But mountains change people, their behaviour, and have funny if not sad effects on relationships. On the positive side I had made two new friends in Marjo and Sammy, I was returning to La Paz, my new home, and the next day was the gran poder, absolutely the biggest and wildest parade I would ever witness. The skies were as sunny as ever.

A Whim and a Leg

My dream of traveling to Bolivia was filled with successful ascents of Andean peaks, but often, as in this story, the best part is not about the climb but in the voyage itself.

Several days after returning from my ill fated attempt on Huayna Potosí I left for a short trip to Hatti Kollu, a 5,000m peak up a valley a couple of hours outside of La Paz. This time my partner was Sami, one of the French sponsored ski team members I met at Huayna. Sami and I were of one mind—to have fun. As is my liking we did this trip with plenty of info but on our own, using public transport. The bus ride was beautiful and Sami, who had been cooped up with his team and had traveled only in private vehicles, enjoyed talking with our fellow passengers and showing them where we were headed. I knew that almost anything goes on public transport but Sami was just learning. Later on we would both find out how true ‘anything goes’ was.

The bus ride ended in Palkoma, a pueblo at the start of the side valley heading up to our target. The driver assured us that buses made the return trip from La Paz several times daily. We thought that 3-4 hours of walking up the valley should get us to the lake and, on the following day, an easy glacier walk and a little scramble would see us atop the peak.

After an hour or so we found ourselves in the heart of a beautiful valley on a stellar day. We

were in paradise and could barely contain our thrill. Except for a scattering of adobe houses, a few shepherds, herds of llamas and sheep, we were on our own. As we stopped for a rest and some lunch a young shepherd boy whose only contact with the rest of the world was with his radio, stopped to chat. He asked us lots of questions and was eager to know about the September 11th attacks. After lunch we continued up the valley, following an old road, ignoring side valleys, and kept looking up for glaciers.



Palkomo valley. Photo - J. Rabinovitch.

After three hours we came to a high spot looking down into the head of the valley, above which was a steep headwall. We could not see any lake or glacier. Unbeknownst to us it was there. Another 3 hours up would have seen us up the headwall to the hidden lake but we turned back thinking it was up one of the side valleys.

We side hilled back, trying to edge our way into one of the side valleys. I had unwisely chosen to hike the approach in my new ‘amigo club’ sandals. They did not survive the llama trails on the steep side hill and I quickly sacrificed them to Pachamama, the Ayamara earth goddess. My plastic boots were heavy and hot but in the end they saved my poor ankles.

Surprisingly, both Sami and I, though tired and a bit frustrated, were pleased as punch just to be where we were. It was simply a lovely setting. We camped by the river in an abandoned, roofless stone house and had soup, roast chicken and wallpaper paste (pasta) for dinner.

After an entirely leisurely morning we headed back down the valley to Palkoma. Neither of us wanted to speculate on our prospects of getting a ride back to La Paz but I think we were both

optimistic. Upon our return we asked a local man whether there were any buses to La Paz. He replied in the negative.

'No?' we asked, incredulous.

'Yes, right now' he replied.

Sami and I did a double take. These type of responses were so common in Bolivia and drove me batty. I think the locals responded to our questions but when they saw that the answer did not satisfy us they would try another answer.

Well, within a minute of this exchange a minibus (van) rounded the corner. I slid open the door. A llama! A dead one lay on the floor of the van. Some parts were simply lying on the floor, others were in bags and the woolly skin was piled high on one of the seats. I jumped back, closing the door in the process. Now that was public transportation!

The driver, his shirt covered in blood, gave us a toothy grin and mumbled something about us walking down the road and that he'd wait for us. "No, it's fine, we'll take it!" I replied, not wanting to risk being stuck out there with no way back to La Paz. "Throw your bags on top of the sacks," he said. Quickly Sami and I rearranged the sacks, to avoid getting blood on our packs and jumped in. The women who owned the late llama laughed at us. "Get real!" I thought. "Where's the little plastic plate and the Saran Wrap, lady? Don't you ever shop at Safeway?" Sami and I glanced at each other, hardly believing what we were seeing.

The van bumped its way down the road and soon after the ladies and their cargo got out. They spent a bit of time looking for something but we could not follow their Aymara accented, 12-toothed (coca-leaf chewing destroys teeth) Castellano (Spanish). Oh well, we thought, whatever they lost will turn up.

And it did. We saw it as Sami and I unloaded our packs to get another mini-van that would bring us to the heart of the city. Under Sami's pack lay their lost item—a llama leg—hoof and all! Laughing, I suggested we take it as a souvenir, but in consideration that some things are better left where they lay, opted against it. We left the vehicle and laughed all the way to La Paz.

Home on the head of a condor

I gasped and wheezed my way up a street in

high altitude La Paz to my hotel room. There I befriended Abby and Paul, a British couple who were looking for a partner to accompany them on a mountaineering trip. As we talked it seemed that we would make a good combination but I was wary as I had made poor choices on this trip before when the person or people had seemed like a 'good combination'. I was also concerned that I would not be a good partner as I was suffering with bronchitis which left me generally quite weak. However, they were keen for me to join them. On the other hand, considering my state of health, home beckoned.

I decided home would wait. I could not leave Bolivia without at least getting a close up view of the spectacular mountains of Condoriri. I would go with them to Condoriri base camp in the Cordillera Real, camp by the lake at 4,600m for the week and only climb if I really improved. Otherwise I could relax under blue skies and read my book. No pressure.

South America was a lesson in getting sick and it was not fun. Although I had spent few days in bed, there were many days that I probably should have. First, stomach 'problems' began on the Inca trail in Peru and continued for parts of the first month in Bolivia. Later, after a success on 5,460m Cerro San Luis in the Quimsa Cruz range, my ailments probably resulted in my failure on the 6,000m peak of Huayna Potosí. Bed rest and visits and tests by a doctor followed. Then, after a week of recuperation in the warmth, sun and low altitude of Mizque, near the Cochabamba valley, I returned to La Paz with a new aggravation, a bronchial infection. I felt I had been plagued, but my excitement about this trip to Condoriri helped ease my frustrations.

Condoriri Here We Come

A day later we were on our way and after a brief jeep ride found ourselves in the tiny village of Tuni, the start of the hike to base camp. Three hours later as I rounded a hill before the lake near camp the peaks suddenly appeared. I stopped dead in my tracks at the dreamlike view of a baker's dozen of jagged mountains surrounding a rocky meadow. One mountain in particular grabbed me. It was La Cabeza de Condor, the head of the condor, whose steep sharp ridge a thousand metres above the meadow just reared up and

said, "Climb me."

I sat there staring at it, feeling overwhelmed. I was terrified at the idea of climbing it, incredulous of its beauty but disappointed that I was so sick that my chances of climbing it were so slim.

The next day, still exhausted with my lung infection, I napped and read while Paul and Abby hiked up Pico Austria for the views. Upon their return they encouraged me to join them the next day for an easy climb up Pirimida Blanca, a black rocky summit atop a gentle glacier. I whined about the weather. It was blustery and cloudy in the afternoon and I was hoping to use that as an excuse to have a weather-enforced lay-in-bivy-day. I do not think they paid me much heed as my rest plans were dashed when Paul woke me up at 4am by yelling in my ear. Almost reluctantly I got up and by 5am the three of us were on our way under clear skies towards this easy 5,000'er. I gasped and coughed my way up the gentle glacier, took frequent rests and in the early dawn light, bonked on the final steep snow slope.

It was quite interesting and humbling to be the weakest member of the group but my teammates were tremendously patient. By 10am we were lounging under blue skies on the summit of my second successful Bolivian high peak. Although Abby did not say it then, she had her doubts about my likelihood of doing anything else that week. Overall though, they were both very supportive and not at all critical of my slow pace.

Then We Were Four

Back at camp we met a couple of 'murcans, one of whom was leaving after falling ill with soroche—altitude sickness. Quickly Paul and Abby added Chris, the healthy one, to our group. The next morning my personal alarm went off again with a shout at 1am and just over an hour later we were off to Pequeño Alpamayo, a peak with perhaps the most aesthetic and straightforward ridgeline in Bolivia. This time my pace up the glacier was better, but nowhere near my usual self, so I had no complaints about my position in the middle of the rope.

By dawn we were on the summit of Tarija. We scrambled down to the col and roped up for the easy but steep climb up the exposed ridge of Pequeño Alpamayo. My third summit was in the bag and although I was still weak, my pace had

been better. My improving health was heartening.

No Illusion

Despite my ill health I continued to stare longingly at Cabeza de Condor, perched high above a terrifying icefall. Just getting to the base of the ridge seemed undoable. My questions, like my open mouthed stare, were endless—

"Is there a route through the icefall?"

"How do you get onto the ridge?"

"How steep is the final ridge?"

Its imposing ridge was intimidating but my longing to just be there and my frustration at not being quite strong enough outweighed my fears. Looking for a partner was still out of the question. For the moment I was a classic poseur, all talk and no do on this classic ridge, the best hard-moderate route in Bolivia.

The next day we made an attempt on Illusion, a mountain considerably closer than the other two we had climbed, but with a bit more technical difficulty. With two baby peaks already knocked off, we set off, with a touch of overconfidence, at the leisurely hour of 7am. At 1:30pm, after an easy ice gully, and a short 5.6 chossy rock climb, the snow on the upper reaches of the mountain had become too soft for safe travel and we decided to turn around. It was dusk by the time we got onto the final trail to camp and as the day changed into night I noticed another change. Hints of my weakness and infection were virtually gone—amazing. I was back to my old self.

Near camp we met three climbers who were concerned about our tardiness and were walking up the trail towards the base of our route to see if we needed help. One of them was Alain Messili, renowned local climber, guide and guidebook author. The other two were a pair of French Canadian climbers. As we talked and became friends thoughts of climbing La Cabeza began to seep into my consciousness.

Along Came Sergio

Back at camp, as I dug into another scrumptious dinner, I snuck a look at La Cabeza and found my nemesis staring back. This time I felt no frustration. I could do it! But with whom? I offered Paul a rope end, but he would not climb without Abby, for whom the ridge route was too

technical, and Chris was not interested. It was time to find a new partner for the climb. I ran around the campsite and was happy to find a solo climber, a Chilean named Sergio. He had climbed Pequeño Alpamayo on his own that day and was keen on climbing the superb ridge of La Cabeza. I liked his cool demeanour and we decided to team up for an attempt on Friday-our departure day.

The next day, Thursday, Sergio and I scouted the approach to the base of the 'scree slope from hell' that skirted the ice fall and led to a gentle glacier below the ridge of La Cabeza. In the meantime the two French Canadian climbers ran up and down the route in 9 hours. Sergio and I estimated that we would need 11 hours to get off the ridge before the slopes became dangerously soft. It would also give me an hour to pack for the hike out to our jeep in Tuni, two hours away.

A La Cabeza!

At 1am on Friday morning I woke eagerly and an hour later Sergio and I set off along the boulder path. At last! We hoped to be on the summit by 9am. We had reconnoitered the path out of camp the previous day, but the full moon, shining directly at us, was blinding in its intensity. Our headlamps were virtually useless against its relentless gaze and the dark shadows cast by the boulders along the easy trail made the going slow. Finally we were in the shadow of La Cabeza but still had the steep switchbacks to the moraine and the super steep scree slope to negotiate. We had easily ascended to the top of the moraine the previous day, but this morning, wearing heavy plastic boots, and carrying a pack full of climbing gear my pace was halved. By 4am we were at the base of the final slope below the glacier. One hard hour to go.

This was the steepest scree slope I had ever ascended. It was doubly hard by headlamp. At each switchback I rested with the edges of my plastic climbing boots firmly gripping the hard ground. If getting there is half the fun then the scree slope from hell was a rip roaring party! Not knowing all the easier ways slowed us down and by the time we reached the glacier three other parties had caught us up. One climber and his guide was headed for A la Derecha, an easy snow plod, a Swiss team was going for the steep

Southeast face of La Cabeza and Alain Messili and his French client, Gabriel, were, like us, headed for the ridge. Still under the darkness of night we donned our crampons and, as the other teams raced up, Sergio and I plodded up the gentle snow slope of the glacier. We were heading for the base of the steep, hidden ice gully that would get us to the ridge. When we got to the base of the gully the sun was just coming up and I took the time to warm myself and have a sip of hot Gatorade. Alain and Gabriel were long gone and to our right we watched as the Swiss pair worked their way through the bergschrund on the face of the mountain.

I drew the lead and quickly worked my way up the ice gully, belayed by Sergio. The narrow shaded gully was a fun little bit of ice and snow, and although many climb it unroped, 70° is past my solo limit. I felt good about the two pickets I placed. As I topped out onto the very narrow shaded ridge I was hit by a blast of cold wind and snow and, when I looked over the other side, nearly shit myself with the exposure.

"No time for that" I muttered to myself.

The side opposite the gully was even steeper than what I had just climbed and the top was knife edged. The sheer drop-offs on either side left no place to sit comfortably. The screeching wind and snow blowing in my face did not help matters.

"Is this what I had longed for?" I thought.

I quickly straddled the ridge, anchored myself to my ice tools in the far side and began to belay Sergio up. As I sat there, shivering, drawing up the rope, I looked around and took in the views. Ahead of me, the ridge, only a couple of boots wide, reared up at a terrifying angle. On either side the drop off was near vertical. When Sergio reached my position, he paused only long enough to exclaim at the exposure, then quickly led up the steep, narrow ridge. A misstep would have been unfortunate, but we were roped up and he placed protection. After what seemed like an eternity the rope came taut and, as we previously agreed, began to climb together.

Along the ridge we gently eased past Messili and Gabriel who were already on their way down. We were getting close but the sun was climbing higher in the sky. We had to keep moving to get to the summit before our turnaround time. As I

belayed Sergio up the last steep bit I could see the top of the ridge where it hit the summit. I looked at my watch—8:50am. The sky was pure blue, the winds were gentle, and though I had been cold, cold, cold on the gentle glacier below, on that exposed, narrow ridge, all I felt was exhilaration. We were going to make it!

Gone were my fears and disappointments. All I felt was awe, and not by halves either. Our position was simply superb. We climbed onto the hard snow on the final, summit slope and began to walk the last hundred metres. But we were not yet there. Although the summit was only a few metres higher, the slope leading to it was terrifying. To our left the slope angled steeply for a dozen metres and then dropped off. To our right there was only air. We were walking along the top of a huge cornice, scarily overhanging the dramatic Southeast face. We tiptoed on the still-frozen snow across to the far end, and at 9:05am Sergio and I were on the summit of this beautiful 5,680m high peak.

After the obligatory summit photos and some water we began our descent, belaying each other or placing snow pickets for protection as needed. Soon we were back at the top of the hidden gully where we rappelled down to the flat glacier, walked quickly down the glacier, and almost ran back to camp.

Home At Last

By 1pm we were back, after 11 exhilarating hours, just as forecast, and quickly packed up. By 7pm we were back in the chaotic traffic jams of La Paz. The whole group, all energized by our fantastic stay at Condorriri, pigged out on Chinese food, fried bananas and beer. Still buzzing with the energy of the mountains, we spent the rest of the night at Ocho de Agua, the fantastic Bolivian folkloric dance hall where we danced and drank the night away.

At 1am, as I crawled into my warm cozy bed in the hotel, 24 hours after I woke up for the best climb of my life, I was still smiling. I was home.

Gringo demons plague Illampu

Epilogue

I've always heard that thoughts could influence the weather, but I never knew that there were cures

for evil thoughts. The people of Cocoyo, Bolivia, near Mt. Illampu taught me otherwise on the terrible night I huddled in a tin-roofed adobe shack.

Where Bad Weather Really Begins

My relationship with the weather began to grow at Huayna Potosí base camp in Bolivia, when Eric, my Bolivian/New Zealander climbing partner, casually offered the possibility of a last pre-winter snowstorm. Winter in Southern Bolivia is cold and windy, but skies are generally clear. At the time the skies were a beautiful blue and I was confident of a successful ascent of the Via Francesi, a beautiful 40-50° snow route up the East face to the lower 6,000m summit of Huayna Potosí. Of course, that night 30 cm of snow fell on us, dashing our hopes for an ascent. Did Eric's thoughts bring the snow upon us?

We returned to La Paz and with another pair, Alain Mesili, Bolivia's most famous guide, and his client, began planning a trip to Laguna Negra on the far side of the Illampu massif. La Paz was cold and blustery and had also received some snow, but we were sure the weather would change by the time we got to Illampu.

Eric and I left for Sorata by bus on Monday where we would hire a 4X4 to take us to Cocoyo, a village on the north side of Illampu. Eric and I planned to ascend to base camp, then make a high camp and do a climb on Pico Norte, a high satellite peak of Illampu. Alain and Gabriel were to join us on Friday for one more climb. Sorata, a lovely village at 2,700m sitting at the base of Illampu was pleasantly warm and we spent the afternoon there buying 8 days of food and relaxing in the sun. Were the weather gods smiling on us?

Slip Sliding Away

Eric arranged transport to Cocoyo where we would begin our hike to base camp. On Tuesday at 6am, we loaded our gear into the pickup and along with several locals started the five hour-long journey. I guess the gods had been playing with us the previous glorious day because on this dark morning they sent rain. But surely the weather would soon change, after all it was mid-July—the dry winter season was upon us.

The trip began auspiciously as the pickup slipped and skidded its way slowly up the muddy

valley road in the dark. I was huddled in the bed of the truck under a tarp-canopy with 4 local men. Once, as the truck lurched sideways, the men and I jumped out into the mud, thinking the truck was about to leave the road. Laughing off the scare, we all piled back in, but I chose to ride standing on the rear bumper for the next hour, one hand on the canopy frame, just to be safe. The real fun really began as we approached a pass at 4,800m and the road became icy with a treacherous dropoff. Would 4-wheel drive be enough to counter the bald tires our jeep was riding on? Along with most of the others, I decided that the result was better seen at a distance and elected to walk the worst stretches.

The descent to Ancoma, the first town on the way, the ascent to the next pass, and the final descent to Cocoyo (3600m) were slow but uneventful. I even got to sit inside the warm cab for the last 2 hours.



Road to Cocoyo. Photo - J. Rabinovitch.

Better Shmetter

I guess half the fun is getting there, but at least by this time the weather seemed to be improving. After some tea and sandwiches in Cocoyo, Eric and I, with two local porters we hired, set off across the 1.5 km long river-crisscrossed plateau and then started the 5 hour long and sometimes steep hike to Laguna Negra, the black lake at 4,600m, where we pitched our base camp.

Near camp, a few cm of snow still lay on the ground from all the earlier storms, and incredibly, one of our two sneaker clad porters wasn't even

wearing socks. One of them had brought a skimpy sleeping bag, neither had any kind of shelter and they brought only cooked potatoes and oranges for food. Thinking of the long, cold night that was already upon us, Eric and I fed them, shared our warm clothes, Eric shared his tiny tent with the sleepingbag-less one, and the other porter slept outside under my ground sheet. Those guys were tough.

In the morning we awoke to blustery, cloudy and foggy conditions and decided to stay in base camp and wait for the weather to improve before making our way to the high camp at the base of the glacier. In the meantime Eric and I would try some rock climbing on the kilometres of granite cliffs all around us. So after feeding our porters some hot chocolate and tea, we paid them for their help and sent them down, with a request for one to return in a week's time.

Unfortunately, by the time we reached the base of the cliffs and scouted a rock route, (likely unclimbed), fog, wind and flurries had moved in. We returned to base camp and I retired to my 'big' bivvy bag for some much desired sleep. I was pretty happy to be back in the mountains regardless of the weather, especially in this choice location. Eric on the other hand was, shall we say, somewhat less patient. But surely, tomorrow would be better, no?

Well, no, it wasn't. Illampu and our route on Pico Norte were completely obscured by clouds and the valley from where we came continually sent fog, wind and light snow our way. But at the head of the valley, a few hours hike away, we noticed 'bluish sucker hole' skies, so as Eric was just itching to climb something, anything actually, we headed there for the night, hoping to climb one of the twenty-five 5500m-5700m mountains ringing it. Even if the views were minimal, I just knew that I was surrounded by a truly magical landscape

I've Had Eee-Nough!

I guess our luck really had run out at this mid-high camp too, because by 2am, our wake up time, the wind had picked up, and snow was falling. Another sleep in! In the morning Eric had lost all hope, and I was inclined to agree. Eric's tent which we shared for that night, was too small

to share for more than one night, so we packed up and returned to base camp. I had some thoughts about hanging out on my own and just trekking around but in the end I agreed with Eric. The weather seemed to be deteriorating and bivvy bags are notoriously hard places to wait out weather. With the unsettled weather, Alain and Gabriel, who were due to arrive in camp that afternoon, would surely not come either.

We packed up for the return to Cocoyo. Eric carried a 'ginourmous' pack and mine was at my 33 kg limit – amazing considering that we decided to leave all the food and fuel behind! Eric left ahead of me, as I needed to eat. He was impatient to get out and refused to wait. The hike out would be long but the route out couldn't be that hard to find, could it?

At 1pm I headed out, following cairns along a flat, rocky ridge-top. Quickly the cairns disappeared and I headed down a side valley, hoping that this was the way we had come. It wasn't. I came to a cliff band and saw no way down. "But wait", I thought, "there's two llamas. They'll know the way". I chased the llamas to the edge of the cliff, but they refused to go further. "Hmm, must be a cliff", I deduced.

I climbed back up a ways, then found another way along the edge of the bluff down to the valley floor where I spent forever crossing a dry riverbed up and down massive boulders. Finally I made it to the major creek, crossed quickly and suddenly, and luckily by my estimation, hit the trail up which we had come. I was aching with tiredness, the light was beginning to fade and I still had a good two hours to go. I pressed on and by the time the sky was dark I was back on the 1.5 km long plateau. Another half hour of stream jumping and I would be at Cocoyo. But a thick fog had rolled in and in combination with the darkness I could not find the way across those deep streams. I was so close I could see kerosene lamps burning in the windows of the houses of the pueblo, but I was stuck. I called out a few times and a man and his son came out to guide me in.

Dynamite Tossing—A New Olympic Sport?

Thankfully, Eric who had arrived only an hour ahead of me – he had got lost too – had secured some floor space and dinner for us in the storage

room behind the store. Alain and his client had arrived from Sorata before our return and had already left, up another route to the laguna. Outside, the fog had really rolled in, and we were happy to get out of our wet and muddy clothes and relax in the warm and dry tin-roofed adobe shack. As our bellies filled with food and as our veins warmed by mug after mug of sweet steaming tea that storeowner brought to us, we giddily swapped stories of our trip-from-hell back down. It was the perfect wind down from a hard day and a frustrating week. As we bedded down for the night I felt fully relaxed and at peace. What could go wrong now?

I was just at that lovely edge of consciousness before sleep when I was shaken awake by the sound of a jet engine over our heads. But it wasn't a jet. The tin roof was shuddering and vibrating violently. The wind, which had been absolutely calm until then, had picked up. Really picked up. Our eyes were wide open. Would the tin roof hold? Our fear sent us cowering to the corners of the shack. I even donned my helmet. By headlamp we watched the roof in terror. Then I remembered I had something that would protect me. I rummaged in my pack and there, right beside my harness and other climbing safety gear, I found it - something I had not left behind at base camp - a package of chocolate chip cookies. Comfort food. I would be ok.

While I munched on the cookies and kept watch on the roof, the wind raged. The clatter of our roof was deafening at times. Suddenly we heard a not too distant boom. Dynamite. Stupidly I offered the suggestion that the local gold miners had gone into their deep underground caves and were busy blasting. But then the blasts came closer. What in tarnation was going on? We heard voices outside. Men's voices - drunken men's voices. And they were complaining about us!

Then, right by our door a trumpet blared. And the wind blew. And the roof vibrated. And the dynamite blasted. Could things get worse?

We barred the door as best we could and huddled in the corners of the shack. Soon the sounds of dynamite blasting ceased, but at some point someone threw stones onto the roof. They made a terrible racket and scared us even more

but the trumpeter was really annoying. He sat outside our shack all night, literally, until 5am and blew half notes at odd intervals, like a drunken fan at a hockey game. In moments of quiet I would start to drift off only to be awoken by another off-key trumpet blast. That damned instrument. Apparently though, it was us who were damned.

Finally we got some sleep and in the truck the next morning on the way back to Sorata we casually asked the driver what all the racket was all about. "To calm the wind down," he responded as casually as someone with a headache who was asked why they were taking an aspirin.

Now it all made sense, as if one can make sense out of superstitious beliefs. We had brought the wind. Noise and music would appease it. Of course what better place to do this than in front of us, the Demon Gringos.

The funny thing is, it worked. Morning had dawned with clear skies and no wind. I guess if thoughts can influence weather, so can dynamite.

3. THE NORTH

Ellesmere Island by James Strümpfer

Ellesmere Island is the northernmost major island in the archipelago that lies to the north of the Canadian mainland, and lies just west of northern Greenland. Grise Fiord, on Jones Sound, is the only civilian settlement on the island, and was established in the early 1950s during a period of well-meant, paternalistic social engineering by the federal government, when Inuit from northern Quebec and Baffin Island were induced to settle here. This had the additional benefit of allowing the Canadian government to claim that the High Arctic islands were settled by Canadian civilians as well as being patrolled by stalwart members of the RCMP, thus strengthening claims to Canadian sovereignty over these areas. Eureka is a weather station on the west coast of the island, established during the Cold War to provide information for aircraft flying transpolar missions in the direction of the USSR, and to provide a backup landing area for

any bomber aircraft lucky enough to survive the nuclear destruction they were to deliver there, but were unable to fly further south. On the northern tip of the island is CFB Alert, a Cold War military base and electronic warfare listening station still in active use, though in reputed recent decline. These are the only currently occupied human habitations on the island.

The Lake Hazen area towards the northern part of the island is national park and a comparatively popular hiking area, and sees several parties traversing the beautiful landscape every season. To reach it is costly, as it requires two return Twin Otter chartered flights from Resolute Bay for drop-off and pick-up. Due to the local geography this area has a particularly mild microclimate, with temperatures several degrees above that of other parts of the island. It is an area rich in fauna, flora, landscape and geological interest.

My own visits to Ellesmere Island did not include the deep pocket required for the charter flights to these well-touristed areas, and hence I made do with the delightfully unknown and untravelled (except by Inuit hunters from Grise Fiord) areas along the Jones Sound coast of the island.

Once you are at Resolute Bay things become more interesting. At least there is space to walk and things to see, like the many crashed aircraft that litter the area, or the ice piled in the bay, or the Inuit village about five or six kilometers from the airport. One might as well start to fill in time, as you invariably have to wait at least a day and often several days for the onward Twin Otter flight to Grise Fiord. Firstly the schedules for these flights usually do not match with the incoming northbound flights, and secondly there are always weather delays, often for many days. A good lesson to learn early on is that the airport staff, the airport manager, the Twin Otter airline staff and others who look so informal are everything but. They are kings of a small kingdom. Please do not trespass, know that you are not welcome, kowtow when you approach, and you will do well to make yourself scarce until the moment you have to board your next flight. If not, you are sure to incur their wrath. You may as well get to know officialdom in

the North as soon as possible after your first arrival. You will do a lot better by looking up Ozzie, or Azziz Kheraj, the affable owner of a Resolute hotel, of all the earthmoving equipment you will see in those parts, the mayor of Resolute Bay, the mover and shaker of much that can be moved and shaken here. Ozzie will calmly invite you in for coffee, share a meal with you, give you a ride to wherever you want to go, hear only a hint of any problematic arrangement that you may have, and before you even know it he will come back and tell you that all the problems have been sorted out, not to worry any more. His Inuk wife is the only licensed polar bear hunting guide in Canada and the world, not a standard traditional female role, which already tells you that theirs is a special family.

Eventually the final Twin Otter flight will depart, but the decision to fly can be made very quickly, and if you are not ready to fly you can get left behind to wait for the next opportunity.

Grise Fiord is a village of about 140 people. There is a modern medical facility, a modern school, a locally owned Inuit Co-op, the only independent Co-op in the Arctic, beautiful original RCMP buildings with their original yellow-and-blue komatiks outside, and modern housing adapted to the climate. Some of the earlier houses are still standing in the eastern end of the town, but they are clearly being torn down or renovated. Along the shoreline (called the “beach”, even when it is totally invisible for most of the year) there are many storage shacks for tools, boats and equipment. Seals for dog food are left on the beach, as are almost any tool or piece of equipment – why put it away somewhere if you can leave it here till it is needed again? Hundreds of dogs are staked out in teams, some far out on the sea ice, some behind the village. All day and night one can hear the dogs discussing the affairs of the day, lamenting their lot, going about their complicated love lives, settling their passions, trying to rest, and always looking and hoping for both food and attention. Inuit dogs are never given any attention except as required for their work, and don't you try to do that now either or you will be told off very quickly. They are also expected to make do with intervals of several days between meals. These animals live tough lives, and it

shows. It is rare to see one of these dogs that is obviously in a good and healthy condition.

The first Europeans who explored most of this part of the Arctic were from the Norwegian Arctic Expedition of 1898-1902, under the leadership of Otto Sverdrup. Sverdrup captained the Fridjof Nansen's expedition ship *Fram* during the earlier Norwegian Polar Drift Expedition, and was also a member of the Nansen-led expedition that first crossed Greenland, in 1888.

Otto Sverdrup's Ellesmere Island Expedition was arguably the most successful expedition of Arctic exploration of the whole heroic period. Members of his expedition discovered, surveyed and mapped more new land than anyone else before them. Their clothes, equipment and traveling methods were superbly adapted to the task at hand, in stark contrast to, for example, British expeditions of that period and of many years later. Sverdrup and his men traveled thousands of kilometers quickly and efficiently with dog teams, living off the land, using a very efficient combination of manufactured fabrics, materials and furs for their clothing, sleeping gear and other equipment. The expedition spent four winters in the north, and lost only two lives. The first, when the expedition doctor, addicted to morphine before the expedition and hoping to cure himself far away from civilization, shot himself at a hunting camp within sight of his companions, to their great horror. The expedition members covered up the facts of his death during those times when suicide was a great scandal, and the full details only surfaced in recent years. The good doctor was given a seaman's burial through the ice at the site where the expedition spent their first winter, at Bedford Pim Island, on the east coast of Ellesmere Island. The second death was that of Ove Braskerud, who died during the winter of 1899-1900 at Harbour Fiord, after being ill for some time. He too was given a seaman's burial and a cross was erected in his honour on a ridge of land above the site of his burial.

Major objectives of our travels in this area were to visit the overwintering sites of this expedition, and to search for other sites where they camped or spent time. We were finally successful in reaching three of their four wintering sites.

A summer journey

My first visit to the Arctic was during August, 1996, when my brother François and I flew from Vancouver to Grise Fiord. A summer visit is best planned for earlier in these parts, but we did not have that option, and arrived as autumn was already setting in. Summer travel in this part of the Arctic is difficult, as the sea ice is too broken to allow passage either by foot or boat, the coast is very mountainous and every slope consists of unstable talus.

Raymond Mercredi, of Métis origin from Saskatchewan but a longtime Grise Fiord resident, quickly became our benefactor and allowed us to use a shack beside the airstrip to store our equipment. He has continued to be our contact here during every subsequent visit, as he has also been for many other expeditions.

Our first trip was into the mountains behind the village, to lay a cache of food and fuel and to scout a route further into the mountains towards the head of the fiord. We soon ran into the first snowfields, steep slopes and a glacier running down towards the west, and decided to establish our cache on a high rock near the glacier. We hoped this would be of use during our eventual return journey.

After some rest back at base camp, we arranged to be taken across the mouth of Grise Fiord by boat. A small area of sea had opened in front of the fiord mouth and everyone was out hunting seals. The boat could get as far as a valley in the middle of Lindstrom Peninsula, the peninsula that divides Grise Fiord from Harbour Fiord, before the ice closed and we could get no further. From here we went some distance inland to look for a good camping spot in what we later came to call Muskox Valley.

The next day we set off westwards following the rocky coastline. The steep mountainside falls into the sea here, and for some stretches there was a rough ice foot (ice frozen onto the land, ice that does not rise and fall with the tide) that afforded an easier passageway. Along other stretches we had to climb partway up the steep, slippery and unstable rocky slopes, a difficult and dangerous undertaking. A day and a half later we reached an area where the coast consisted of vertical rock that we were not able to climb around,

and with no ice foot, so the only option was to take to the half-melted sea ice, where our progress was much faster despite the danger of breaking through. We eventually reached our first destination, the spot inside Harbour Fiord where the Norwegian Expedition's ship *Fram* was frozen in during the winter of 1899-1900.

We camped here for two days, exploring the area, and to allow François time to recover from a cold. We examined the interesting century-old expedition detritus until it was all covered by a heavy snowfall. Some distance above the overwintering site and our campsite, high up on the ridge, is a small cairn with a wooden cross to commemorate the death and burial of Ove Braskerud. We found another small cairn nearby, with its earliest record that of an RCMP patrol of 1928, inside a Horlick tablet container inside a larger Danish butter container - traditional dogsledding rations containers.

As we could not follow the steep coast further into the fiord, we climbed the mountain behind the camp into whiteout conditions to the snowfields at the top, and followed a set of muskox footprints which lead us northwards and eventually down to the lowlands at the head of the fiord. The only time we had to retrace our steps was when we thought we could find a better route than the muskox, using map and compass, and promptly got stuck in impassable terrain.

During the course of several more days we traveled to the head of Harbour Fiord, then eastwards over a pass towards the head of Grise Fiord, then southwards again along the western shore of Grise Fiord. During this period the weather continued to be grey and overcast, with episodes of rain and wet snow arriving at intervals of about ten or twelve hours, sometimes accompanied by wind. As long as we could manage to travel when it was reasonably dry and camp before the next wetter and snowier period started, it was quite comfortable.

We travelled comfortably and without haste, often stopping to examine our surroundings in detail, admiring the tiny clumps of vegetation that would sprout on the tiniest piece of bone that has been decaying for millennia providing sufficient nutrition to allow growth. Sometimes we would sit in a sheltered spot for an hour or two, boil tea,

and travel the magnificent landscape with our binoculars. Sometimes we would come across a small area, the size of the floor of a small tent, where there was a bit of moss growing around a larger stone or two, which immediately identified it as a tent site of the Independence I people of the Arctic Small Tools tradition, the earliest human settlers in this part of the Arctic, around four thousand years ago and earlier. At other times we would come across a stone conical structure, sometimes with a few bones lying in the bottom, a structure readily identified as a fox trap, likely around a thousand years old. Now and then we even found a spring steel leghold trap, abandoned in the last twenty or thirty years when fox fur trapping became unrewarding. The terraced pebble beaches showed clear evidence of the land rising above the sea over many centuries as it rebounds from being weighed down by the mass of glaciers during the last ice age. With daylight present around the clock, travel becomes very easy. You can keep going for as long as you like, and camp when you like. There is nothing like approaching darkness to force you into a set rhythm, or to make travelling or wakefulness difficult during one part of the 24-hours.

At the mouth of Grise Fiord we had to take to the sea ice again to cross to the eastern shore, a difficult undertaking here as the ice was covered with meltwater streams, some that we could jump over, later many that we had to wade through and hope that the rotten ice at their bottoms would hold and not cause us to plunge into the dark depths of the fiord. Near the shore the ice ran out, and we had to wade through the chest-deep water to cover the last fifty metres. As soon as we reached shore we warmed up by stripping off our clothes and boots, getting into sleeping bags, and drinking several mugs of hot tea. Eventually we set up camp nearby for the night.

Over the next days we traveled back to Grise Fiord village over difficult terrain. The first obstacle was a very awkward climb up a steep talus slope that threatened to start sliding with every step, followed by climbing the crumbling vertical rock band at the top. Not something to be repeated readily with gear suited to heavy duty hiking. Some distance further we reached our food and fuel

cache, disturbed only by a few small animals trying to bite through the plastic wrapping. Eventually an eighteen-hour day of walking through a blizzard with fluffy snow camouflaging large rocks with leg-snapping gaps in between, saw us reaching the airstrip above the village, tired and worn out.

We rested here for several days, trying to let our sore muscles heal, happy to shelter while the blizzard blew itself out. Afterwards we only had strength left for an easy three-day outing along the coast eastward from the village to the next valley, known as "East Flats" by the local people. The earliest (of three) airstrips in the area was built here, this one likely during WW2, though no-one seems to know its history. We stumbled around like invalids on our sore legs, preferring slingshot practice, binocular travels and minute searches of the gravel and flora next to us, to any wide ranging walks.

Eventually the Borek Air Twin Otter came to pick us up again.

A winter journey

Early April, 1998, saw us flying north again, this time with winter polar travel equipment, gathered from the few rare sources and private contacts that can provide this kind of thing, and with what looked like a mountain of food. By early April there is already daylight around the clock at this latitude, and the worst of winter cold is over. We had temperatures in the low minus thirties degrees C at the start of our journey, to a few degrees above freezing when we left at the end of May. This is a comfortable travel period, when the light is good, the sea ice is good everywhere and provides a highway to travel on, temperatures are comfortable for camping and travelling, and during most years the ice surface conditions also make for easy sled and ski travel.

Unfortunately the winter of 1997-1998 was a 'strange' winter in these parts, with heavy snowfall and almost no wind until well after we arrived. The absence of wind to pack down and harden the surface ensured that we had deep, soft snow to travel through, about the worst possible conditions for sled travel. We set out with food and fuel that could be stretched to last 70 days, planning to travel for about 60, hoping to cover about 750km in a large circle around a section of



Scenes from a winter journey.

Photos - J. Strumpfer and J. Strumpfer collection



More scenes from a winter's journey. Photos - J. Strumpfer



Summer travel around Grise Fiord. Photos - J. Strumpfer.

the southern part of Ellesmere Island. During a normal year those plans would have been perfectly feasible, but not this year. My diary tells of many days near the start of our journey when we spent ten and twelve exhausting hours per day and covered only five or six kilometers through the soft snow.

When passing the mouth of Harbour Fiord we camped some distance offshore, then spent one day skiing to the *Fram's* 1899-1900 overwintering location, carrying only a backpack with food, stove, extra clothes, emergency tent and a shotgun, for bear protection. This is one of the fiords the Inuit are wary of entering as strong currents can cause thin ice.

On our return to the tent at about 10 pm local time the sun was shining on our backs from the north, which left the sky and the surface aflame in multi-coloured shining diamonds as ice crystals slowly fell in the minus 30 degrees C air.

Eventually we decided to change to an out-and-home journey along the Jones Sound coast, as it was clear that we could not travel fast enough to cover our intended circular route. We started making better progress after two blizzards kept us tent bound for several days, but packed the snow down hard. Soon afterwards we established a cache of excess food and equipment, and only carried with us what we needed to reach the head of Goose Fiord, our planned turnaround point. The lighter sleds, improving conditions and the long stretches where we could travel on the smooth ice foot allowed us to travel much faster.

While sleeping at our second camp in Goose Fiord a polar bear crept up to one of our sleds and sprang upon it, and must have been surprised and disappointed when the "seal" made no attempt to escape. It examined the tent, leaving saliva marks on the billowing sleeve entrance, finally ripping the fabric with a paw slash just above my head, waking us. Fortunately the bear started to move away and we had no cause to use the shotgun. We saw several more bears during the journey, but had no other problem visits.

Soon after we reached the *Fram's* 1901-1902 overwintering site on the eastern side of Goose Fiord, and some days later the 1900-1901 overwintering site at the head of the fiord. This last position also marked our turnaround, on a

cold, windy day at minus 25 degrees C, with the landscape looking forbidding in those conditions.

On the way back we crossed from Goose Fiord across the northernmost narrow isthmus into Walrus Fiord, and traveled there over the almost bare ice to the second narrow isthmus, where there is a polynya, an area of water that remains unfrozen year round. Here we crossed back onto Goose Fiord, to resume our journey along Jones Sound back to Grise Fiord.

Our final total distance covered was 500km in 55 days, with eleven days spent confined to tent with no traveling done due to dangerously strong winds.

A spring journey

Spring 2003 saw François unable to relinquish the demands of family and work, so it became time for a solo journey. I traveled to Grise Fiord at the end of April, and returned home early in June. With the change in climate during the last few years spring has started to arrive earlier in the far north, so that even early May now brings early spring weather, which does not make for comfortable travel.

This journey also marked an excess of contact and problems with petty Arctic officialdom. It is something one should be prepared for when traveling to these small villages, and one should pack a large amount of patience and tact to help one deal with these people.

On the other hand it was a pleasure to renew my contacts with several Inuit friends, to meet new ones, to meet several of the transient RCMP and nursing staff, to meet the famous Arctic traveler and glaciologist Fritz Koerner and the well-known Irish Arctic artist Danny Ambrose, from Iqualuit.

Travel conditions in spring are lousy, to say the least. There seems to be three weather options: pea-soup-density fog (which means white-out conditions), strong winds with blowing snow, or light winds with wet falling snow. The sea ice surface is treacherous, and I needed to keep well away from land to avoid thin ice.

Nevertheless, it was wonderfully peaceful and tranquil once I was away from travel difficulties and the village bustle, back to the quietness and solitude of being alone on the ice and living quietly in the tent. I could sleep as much as I needed to,

start traveling whenever I wanted to irrespective of what time it was, and stop when I wanted to. I preferred to travel when the sun was in the north, as the landscape colours were more to my liking and it was a little colder than which made it more pleasant outside, but any time of the day would do. I had no ambitious plan or destination in mind, and traveled where my interest took me, examining the land where I wanted to, looking for artifacts, hoping to see wildlife, marveling at the beauty of icebergs frozen into the ice. Eventually my knees started to complain about the hard work, which was a good signal that I should start on my homeward journey.

Back at Grise Fiord several of us waiting to fly out were grounded by a weeklong blizzard that prevented any aircraft from landing at the tricky airstrip. That meant many extra mugs of tea, hours of visiting and conversation to pass the time. Eventually a clear day dawned, the runway was quickly plowed, and an RCMP Pilatus P12 and a Twin Otter landed quickly, one after the other, before the weather could worsen again. But it remained clear, and we could all leave when we had to.

**Auyuittuq National Park, Baffin Island,
July – August, 2001**
by Jenny Faulkner

19 July – Iqaluit. Looked out at 5:30 am. Socked in and raining so we are not going anywhere today. Back to bed. At 8:56 am we are asked if we are ready to go for our 9 am start! We stare in disbelief. Feverish activity and we're off at about 10:30. There are four German tourists, five Inuit family members and two Inuit crew, John and I and Pauloosie. Final departure of boat is about noon. The trip of 40 km up North Pangnirtung fiord to the trailhead takes over five hours, as we slow down to look at flocks of eider ducks, fulmar petrel nesting cliffs and icebergs. Pauloosie's family cooked caribou stew for dinner and then waved us goodbye.

Still socked in with 24 hours daylight, there is no hurry to set up camp and so we set off up the west bank of the Owl River at 7 pm, to put some distance between ourselves and the coastal polar bear population. Strong following wind; large

rockfall behind us, shortly after we had passed; three tufts of dense long white-to-yellowish hair – suspicious; Canada goose family and lots of goose scat and flight feathers. We hike about 7 km and set up camp on a bump at about 150 m. at 11 pm.

20 July – Lazy start. Still low cloud. Hike across bump with plague of mosquitos. See more polar bear fur. Cross major creek beside Owl River emergency shelter after about 13 km. The wind picked up and kept the bugs at bay and it started to clear a little and at last we can see some impressive rock faces, snow and glaciers. We decide to camp there and take a stroll up the tributary valley to an obvious shoulder. By 600 m it becomes obvious that we could keep on going forever so we just enjoy the view then go down. There are four swans on Owl River. Many small flowers hiding in the turf.

21 July – Up at 4 am. The sky is crystal clear, mountains gleaming pale tan, sky – intense blue. There is a cold, strong wind blowing. Perfect. Forget it! My body reminds me it is really only 1 am. Back to bed. Up at 7 am. The strange valley cloud has settled in again at about 250 m above the valley floor. The wind has dropped and the bugs are biting.

Trek on along the tundra bench. See 3 loons on twin lakes. Cross down to the sandy riverbank and have lunch on a beautiful white sand dune area covered with low-growing willow and bright pink broad-leaved willowherb and strange large cushions of moss campion. Apart from the many geese footprints, there are prints of caribou, weasel (?) and one small bearprint.

Trek on again across bumpy tundra and bumpy bogs. The wind starts to blow up again and after about 13 km from our last campsite, we find a large erratic rock for the only shelter for kilometres.

22 July – Leave Big Rock at 10:30 am. The usual low valley cloud. By noon it is raining. Boggy terrain with sphagnum moss and cotton grass. An area of lemming holes with whorls of dry grass. At 12:30, reach June Cabin, another pleasant sand area. Another "older" tuft of white fur. Approaching a long bend in the river and we can see long straight deep glacial gouges in the rock face across the river. Weather not conducive to a trip

up June Valley and so we continue on for a while on firm sand by the river, eventually crossing an area of strange dirty channels and quicksand and becoming increasingly “bogged-out” until we find a firm spot beside Igluk Creek – glacial, but at this time, reasonably clear. Very briefly the clouds part and we see up the valley to the Turner Glacier and Mt. Asgard.

23 July – From 1 am to 5 am – totally soaked in. Read through our entire library and map collection again. Brave the weather for breakfast at 9:30 am – beginning to clear a little. By noon, sun is breaking through and while we have lunch, we see a fox in its summer livery of patterned grey and red.

By 2 pm it's sunny and clear over mountains to the west. We stroll up the Igluk valley to about 600 m. hear a raven calling. See into the next range of mountains and the Igluk glacier. The river follows a straight course down smooth flakes of pink granite. Old caribou antlers overgrown with moss.

24 July – Get up early for creek crossing – with reduced volume and flow, it is running completely clear at 7:45 am. After trekking for a while on tiring bumpy bog and tundra, we go higher up and find firmer land on rocks and heather. After another major stream we find more hard sand by the river. We can now see the area of the enormous Highway Glacier on the east side of Owl River. We will eventually have to cross the headwaters of the Owl River to reach Glacier Lake, but the volume and speed of the water at the confluence of the Highway Glacier and the Owl River is daunting. Once south of the confluence, things don't look much more hopeful and the usual crossing place where the Rundle River meets the Owl had been reported to us earlier in Iqaluit as quite possibly impassable.

Behind us down the Owl Valley is the usual low valley cloud and ahead toward Akshayuk Pass it is completely soaked in. A cold wind keeps bugs at bay.

After about 9 km, we arrive at Glacier Cabin at 12:15 pm. As on the day before, it is mainly sunny by 2 pm. We set up camp near the cabin. We set off to scout out the Rundle River to look for a crossing place. It covers a huge area of minor to major braiding, the deepest may be hip deep

raging torrents. We follow the river for a while then climb up “Cabin Mountain” to 750 m above the River – nowhere looked hopeful for an easy crossing, but the view into the Rundle Glacier is worth the effort. We see our first snow-bunting and a lot of miniature Labrador tea.

25 July – Set alarm for 2:30 am. Get up, breakfast and packed by 4:25 am. Re-examined the most braided area of Rundle River. Some of the shallow braids are dry; all in all it looks about 25 cm lower than the evening before and not running so fast...We select our spot and go for it, crossing at 5:10 am. John sees a hare. BUGS!!! Cross low shoulder of Mount Battle then up and along the moraine to the north of Glacier Lake. Beaches and moraines to runoff from Norman Glacier are much braided and quite shallow but cover a huge area. Clamber over the south moraine of Norman Glacier, and find ourselves in a little sheltered valley looking south to Summit Lake, but protected to the north, east and west. We have only covered about 6 km, but the lovely weather and intimate surroundings entice us to stay for some R & R and housekeeping. See a mother ptarmigan and two chicks. We leave camp at about 3:15 pm to admire the view from a “bump” on the side of Mt. Alvit above our campsite. After many bumps past the original one which we never did encounter, we decide to call it a day at 1350 m. Mt. Alvit is a cirque peak with a pocket glacier and we have nearly reached the head of the cirque.

26 July – Leave Hidden Valley at 6 am. Our next major creek crossing is below the Turner Glacier, one of the highways to Mt. Asgard. Above the lake, between moraines as we wend our way are beautiful, lush willowherb gardens and a mountain sorrel vegetable patch. Turner Glacier creek doesn't have a reputation. We approach with confidence and choose our spot. Although it is quite deep and running strongly we are taken aback in the main channel when we suddenly drop from knee to waist deep (and fortunately back out again). By 9 am the sun burns off the morning clouds but there is still a cold wind. Final views of Asgard up Turner Glacier. Past Turner Glacier is a high moraine “plateau” between Glacier and Summit Lakes. There we have lunch, dry out socks again and encounter a large bumble bee.

Walking along the western shore of Summit Lake under Iviangernat Mountain we see many arctic poppies blowing in the wind. There is a foxprint in the sand and some dog-like scabbles. Iviangernat Creek is very full but braided. Mother snow bunting protecting an unfledged young. Find a nice flat elevated spot between Iviangernat and Mt. Freya for a campsite after 9 km. Lovely clear water, sunshine and a bug repellent breeze.

27 July – With the large Caribou Glacier coming up, we set the alarm for 3:30 am. Leave camp at 6:30. Reach North Caribou lateral moraine at 7:30 am. Decide not to go for the creek crossing as the beautiful weather tempts us to go up the moraine.

Top of moraine at about 750 m. Views of Tyr, Thor south, and across the lake, Sigmund Peak, Mount Sigurd, Tupeq Mountain, Umik Mtn, Breidablik and behind Bredablik Peak, the pinnacles of Mount Baldr. Immediately beside the moraine to the N, Freya Pk and to the W, up the Caribou Glacier, Adluk Pk. Bright sun and bitter wind – no bugs.

Cross Caribou Creek without event; have lunch and potter about on beaches at the outflow of the creek before climbing over the south Caribou moraine. Decide to camp at the Summit Lake “Resort”. See PEOPLE for the first time in eight days.

At 4:15 pm leave for a hike up the N rim of Tyr Pk cirque. By about 1250 m the rocks become “iffy” and the cresting of one ridge only reveals more beyond. We descend slowly, traversing NE. John reaches a point where he can just see both towers of Mt. Asgard. See more antlers, snow buntings and a baby hare at campsite.

28 July – Leave Summit cabin campsite about 5 am with the prospect of crossing “Nasty” Creek today. Tyr Creek – no problem. Pass the headwaters of Weasel River. Some broken up ice but not the cover of two years ago. We see a weasel in Tyr Meadows and another on north Nasty Moraine. We find a good crossing on Nasty Creek. Quite deep and very strong current. Over the moraine to Nice Meadow. Cover about 4 km. Decide to have a housekeeping day. Discover a deep pool for a bath on Nice Creek. By 1 pm Forkbeard and Nasty waterfalls are torrential. Lots of purple saxifrage on N Nasty moraine.

29 July – Get up at about 5:30 am – eight hours sleep for a change. See a peregrine falcon chasing a raven. Peregrine perches on moraine for a while. Climb to about 900 m to col above Nasty Creek. Fabulous flower gardens and red mushrooms. Views of Summit Lake and Fork Beard Glacier “Plateau”, and down the Weasel River. Large grey and white hare. On descent from Nasty Col we watch with binoculars, four persons trying unsuccessfully to cross Nasty Creek – they had left it till too late in the day. Later in the day we meet a young couple from Iqaluit who say the four plus one other were still sitting hopelessly on the moraine. Later still we hear that they had choppered in to Summit Lake and planned to walk out in a day but spent an unpleasant night unsheltered on the moraine.

Set off in a leisurely manner without a care in the world now that we had conquered Nasty Creek.

We are sauntering along the River below a cliff bank on the Mount Northumbria massif, when we see twin waterfalls pounding down from the cliffs. These posed no problem two years ago, but after the recent heatwave – a different proposition. For the first time we are almost defeated by a creek crossing, as halfway across the main channel of the first creek Jenny reaches a point where the current is so strong that she literally can not put her foot down before is washes away. Search around and eventually find a shoal where the Northumbria Creek meets the Weasel. Second creek is more braided.

Reach Thor Cabin across from Mt. Thor on the east side of the river. Meet one woman there. Press on past Odin Creek and a large moraine area of boulders and little sandy beaches and braided streams to a flat grassy bench below the Odin massif where we camp – about 8 km today.

30 July – Ready to leave by 9:30 am. Chat with an Inuit park ranger who was one of the party who overnighted on Nasty moraine. We scan the face of Thor as the ranger says there was a solo climber from whom they had not heard in a while.

Another hot day with a breeze – no bugs. The Weasel River with more rocks and sand than the Owl seems to be less buggy anyway. At this point there is a definite beautiful trail by the river. So hot



North of Summit Lake. Photo - J. Sapac.



Breidablik Pk. from the S. Photo - J. Sapac.



In the Weasel R. valley. Photo - J. Sapac.



Looking across the Weasel River to Breidablik Pk. (left) and Mt. Thor (centre). Photo - J. Sapac.



John and Jenny SW of Glacier Lake. Photo - J. Sapac collection.



Mt. Asgard from the Owl R. Photo - J. Sapac.



Bird Glacier and Mt. Thor. Photo - J. Sapac.

recently that some parts of trail are under water. South of Odin and Thor the valley widens before it is forced into rapids by enormous moraines. We relax on the huge sandy beach near the river which is almost like a lake at his point this year.

Set up camp on the huge moraine near a little meltwater pond and above a deep blue glacial lake.

Set out for trip to Schwarzenbach Falls at 3 pm but outflow from Glacier which runs from S Mt. Odin is so great that we are defeated by what is virtually a lake emptied by rapids. Back to camp. Huge rockfall in Mt. Thor area. Cracking seracs all night.

31 July – Get up at 6 am. Perfect day again. Leisurely breakfast and pack. Sunbathe on Glacier Lake sand dunes and after a (brief) swim, set off at 9. From moraine to E side of Weasel there is the only bridge at the narrow rapids, today a raging force. Trek along meadows to Windy Lake cabin and ranger station. There we chat to two young Californian climbers who tell us about the climb they had already done on Mt. Asgard and of their intention to return and do a class 7 route in one day. On their first trip, possibly because of the big thaw this year, they had found the cached ice axe of the man who did the first ascent of Mt. Asgard 26 years ago.

Cross Arctic Circle. Climb up along a sandy bench to a high point above the river – a bump by a creek whose banks are formed of strange old ice and sand mouldings. We can see into Crater Lake where the Tumbling Glacier, a really broken up icefall, calves directly into the lake. Traverse the slope at about 175 m. Some huge willow (about 50 cm high) tucked into slope. Down to river level again, over a sandy mesa. Find a good flat bench on the S slopes of the Tirokwa massif.

1 August – High thin overcast. With binoculars count about 22 adults and 10 young Canada geese browsing on Weasel River flats. Suddenly they all run to the river and swim to the other side. Later we realise we were camped near a fox's den. See people going in both directions down on the flats. Climb a flank of Tirokwa to about 550 m. Lunch and a great view down Wesel River flats and south Pangnirtung fiord. Small brown birds, usual yellow butterflies, large-flowered

wintergreen, tiny blueberries in fruit, lemming burrows with haystack.

On descent, in a little valley behind a knoll, behind our campsite, startle – a black and white KITTEN – took a double take and realised it was a fox kit. It runs off, followed hastily by a tortoiseshell sibling. The black and white one reappears peeking over some rocks on top of the knoll and watches us for several minutes until we move.

Back at camp hear a rockslide above the falls next to Tumbling Glacier, turning the water brown. Tuft of short soft white fur hare near camp.

2 August – Warm, but overcast, some rain, gusts of wind. Start final trek along the flats to Overlord Ranger Station where an outfitter from Pangnirtung is supposed to pick us up at high tide. (Large tides in Baffin leave estuaries and bays high and dry at low tides).

See adult fox, tan and black – probably our kits' mom – near first creek crossing. More water than two years ago but nothing compared to Owl River tributaries and Akshayuk Pass.

Then to Mt. Overlord where the last Ranger station and emergency cabin are. Radioed (or tried to?) outfitter in Pangnirtung. Nice day. Became quite a party – twelve people – culture shock!

We pack for the boat trip, munch some excess food and chat to the various people, spending some time at the emergency shelter where the radio is and where the older climber who had just completed what he considered to be the most difficult route up Thor, set up court and talked gear and climbers' jargon with the two young climbers, in between consuming a large volume of vodka. The climbers' jargon slowly gave way to wise holding-forth on any topic you care to name.

Boat does not show at 4 pm. Weather blowing up. Eventually Jaco turns up in a small boat that was being tossed about in the swell and wind. He says he can only take the young couple who have to catch an earlier flight than us, - but maybe someone would come for us later. Jenny hoped that won't happen as it is by now quite stormy.

Return to bedlam at cabin – older climber keeping everyone entertained – still clutching an almost empty bottle. Cannot get through to Pangnirtung on radio. Decide to camp on hillside above the boat landing flat rock a short distance

past the cabin so that we can keep an eye on boat arrivals. Heavy rain.

3 August – Sitting over tea next morning when we see a boat approaching. Joavee arrives unannounced and we scramble to pack up. Leave at 8 am.

**Baffin Island, Auyuittuq
National Park – from Overlord to Summit Lake
28 July - 12 August, 2003
by Ellen Woodd**

Who would have believed that this trip above the Arctic Circle would ignite evening conversations about Global Warming or even debates about the true purpose of the tiger in Yann Matal's novel "The Life of Pi." The word 'evening' is even a debatable word as the northern daylight lingered long after exhausted hikers had crawled into their sleeping bags. If this sounds like the beginnings of an expedition fraught with disagreements and other useless wastes of energy, it is not.

For two weeks, five good friends traveled through spectacular scenery. The we included Monika Bittel, Marilyn Cram, Evelyn Feller, Carol MacMillan and Ellen Woodd. The spectacular scenery was between Pangnirtung Fiord and the Parade Glacier below Mt Asgard, a day hike above Summit Lake. The trip was more than that, too. All of us used our Air Canada points to get at least part way there.

When Monika and I arrived, the others had already been in Pang for at least a day. They had done all the hard work of finding white gas and organizing an outfitter to take us up the Pangnirtung Fiord. All we had to do as a team was gather and sort gear for the last time and decide whether or not we were going to take glacier gear, which we did. Then we went to Park HQ where we paid our money, filled out countless forms and had our orientation. That done, we put on bright orange survival suits and climbed into Joavee's boat for the two hour ride up to Overlord, at the head of the Fiord, and the start of the hike.

The tide was high, which made for an easy drop off. We shouldered our heavy packs – two weeks of food, no matter how you cut back, still

weighs too much – and started off. We managed to cross the first major creek without taking our boots off but soon succumbed to the ritual of taking off our boots and making the crossings in our water shoes. Our first camp we wanted near the valley leading up to Turnweather. As it turned



Marilyn, Monika, Evelyn, and Ellen on "Mt. Thorli", below Mt. Thor. Photo - C. MacMillan



Carol with Mt. Asgard in the background.
Photo - C. MacMillan collection.

out, that was exactly where we camped but we didn't know it until after we had packed up and looked at the map again. We decided to shoulder our packs and head to Windy Camp and try to explore Turnweather on our return.

The route to Windy was spectacular. Lots of creek crossings and lots of people traveling in both directions. We took the time to visit and chat as it was a welcome relief to take off the heavy packs. Just before we reached the Arctic Circle

monument we hiked through an amazing sand dune formation. We were glad it wasn't windy as it would have been brutally hard on the contact lens wearers. At Windy we found the bright orange huts we had first seen at Overlord. One was for the wardens and the other was to be used in emergencies only. A tiny tiny one housed the oil drum toilet. We found a campsite and settled in for the night.

Inclement weather allowed us a relaxing recce of Mt. Thor so that the following day we could have a crack-of-dawn-start. Sure enough, we found some sporadically placed cairns and then the route became obvious and we were able to snake along the crest of the lateral moraine wall. Below us was the receding Sivingavuk Glacier and as we moved into a saddle we were amazed at how much the glaciers had retreated. Up through the boulder field on the backside of Thor we scrambled, getting better views of the Fork Beard Glacier at every step. Mt. Thor looked as impressive from the back as it did from the front. There seemed to be no easy access to its summit. Time was spent examining it through the binoculars and Carol ventured alone over to the base of the summit pyramid. In the end we settled for the sub peak to the south we named Thorli. From this vantage point we had spectacular vistas...the huge vertical to slightly overhanging rock face of Mt. Thor in front of us, the entire Weasel River and Pang Fiord, and to the north, Mt. Asgard's turrets rising out of the Penny Icecap. Knowing we had 24 hours of daylight allowed us the luxury of lollygagging on the summit until after 4 pm. It was a 'thigh burning' route down and the mosquitoes became a plague long before we returned to camp for a late dinner.

This trip was basically about crossing creeks but the next day we crossed the Weasel River on the only bridge in the park. This engineering marvel was firmly bolted and suspended by numerous cables which were inspected by the wardens on almost a daily basis. A number of streams needed to be crossed but we were able to do them all by jumping from rock to rock and keeping our boots on. The last one of the day was a little bigger, but Monika's longer legs and her kindness in ferrying our heavy packs across allowed us all to boulder hop more easily.

I am not a water person despite being a Pisces. Early on in the trip I began to pontificate on the dangers of creek/river crossings. I don't feel I read the water well so I am unsure of where I should put my feet. I felt vulnerable and afraid. Between Thor camp and Summit Lake there was one major crossing. At one time it was cabled. We saw the remains of the cable in twisted and broken bits as we came to this creek. A group from the north had just crossed it an hour before and we found them putting on their boots. After a recce and consultation, it was decided we would wait. Dinner was cooked, people relaxed and read and I, unfortunately, used the time to continue to psyche myself out. I imagined how I would get out of a worst case scenario instead of concentrating on just putting one foot in front of the other and getting safely to the other side, which is basically what I did. We all left our boots on except Monika, who used her Tevas with socks. The current was very powerful and in more than one place I was glad of my two ski poles and sometimes a helping hand.

Another two hours and we reached the camp at Summit Lake. All the other tents were very quiet as we took off our wet boots and crawled into our bags.

At Summit Lake we planned to spend some time and do a little exploring. On the first day, Ev rested while the four of us climbed up towards Mt. Tyr and a viewpoint. The following day, I stayed behind while the others walked to the end of Summit Lake. Hardly anyone now was in camp. Two New Zealand fellows who had come to climb Asgard were our only company. They were getting ready to leave and were very short of food. We invited them for dinner, even though our supplies were also getting low.

We left early the next morning to use our glacier gear for the first time. We followed a faint trail along the moraine above the Caribou Glacier. The glacier was "dry" and we walked up it, only putting on our crampons for the final ice slope of the Parade Glacier below the rocky faces of Mt. Asgard. It had taken us a leisurely five hours from Summit Lake. The weather was clear and warm although a smokey haze seemed to hang in the air. We finished lunch and headed back, amazed at the melting that had taken place in those few



Overview of the nature of the Baffin Island trip - river crossings, hiking, glacier traverses, and camping. Photos - C. MacMillan, except bottom right - E. Feller.

hours. The glacier was actually covered in water, about 2-6 cm, and the surface rivers that we had stepped across before were now raging torrents and the roar as the rivers tore down the into the depths of the Moulin, was deafening.

A couple of park wardens had arrived just before we started dinner at 7:30pm. After questioning whether or not we were a guided group, one of them left in the motorboat that was stored beside their cabin. One of the Kiwis told

us later that some people had been having trouble crossing the Norman Glacier Creek and when the warden went back to pick them up, they said that they were already in bed, and asked if he would come back around 10 am the next morning. Wow! Some people!!

Next morning we were across the big creek by 8 am, all wearing our water shoes except Ev who used her boots. The current was still very strong, strong enough to pull off one of Carol's shoes. We met two fellows who were tentatively looking at the crossing as we ate breakfast and when we got to Thor camp there were three French Canadian girls who had attempted the crossing at 5 am and turned back. I think that crossing turned off many people because there certainly hadn't been very many folk making it to Summit Lake while we were there.

It was another hot day. We looked for shade behind rocks and stripped off layers of clothes while we ate lunch. It was about 2 pm when we heard the roar of rushing water and came to a creek we couldn't cross. It was a roaring chocolate brown with a great crunching of rocks and boulders. We humbly observed the awesome power of water and waited, read, sketched and then ate dinner. About 8 pm we were able to cross at the mouth and hardly get our feet wet. Tired and plagued by mosquitoes, we slogged on until twilight forced us to stop. Our choice of a wet and boggy point of land jutting out into the Weasel River was not our best campsite.

Later the next day we made it to Windy where we tried unsuccessfully to use the Satellite phone to arrange our transportation out. The SBX11 in the emergency shelter didn't seem to work either. We packed up and traveled on and found a superb camp nestled in the rocks with a cook site that was almost a cave. I was able to get through on the Sat phone in the evening and left a message on the warden's answering machine.

The final day we found the route we had looked at almost two weeks before up the Turnweather Glacier. Ev wasn't feeling totally herself after taking a bad fall on the rocks along the Weasel and sporting a contused bruise on her hip. The other three continued on exploring deep into the cleft above the remnants of another receding glacier and Ev and I headed back down



Breidablik Pk. (left) and Mt. Thor (centre) from Summit Lake. Photo - E. Feller



Mt. Asgard (right of centre). Photo - C. MacMillan.



Mt. Thor and "Thorli" to right. Photo - C. MacMillan.

for a wee wash and then on to Overlord Camp. The final creek crossing was a long and drawn out affair. We met three people heading north and they were already freaking out over the crossings. Ev and I got into camp to find the two Kiwis had also arrived. We found the cache we



Epilobium at Summit Lake with Mt. Thor just left of centre. Photo - C. MacMillan.



Fork Beard Glacier. Photo - E. Feller.



Breidablik Pk. (above) and glacier stroll (below left). Photos - C. MacMillan.



left buried in the rocks and had a great dinner of tortillas and canned peaches.

The tide was out. Tides in this area are huge with a rise and fall of over 14 metres. So we had quite a hike the next morning in order to meet the outfitter's boat. However, he was able to squeeze us all in and we were soon back in Pangnirtung.

4. IN AND AROUND B.C.

Blow-out on Mt. Lytton - The Mountain With Fluctuating Elevations 6-7 October, 2002

by Karl Ricker

Mt. Lytton lies at the very north end of the Cascade Mountains. Seen from the TransCanada Highway when driving south from Spences Bridge, it rises steeply to a long crest which parallels the Fraser Canyon. The town of Lytton sits about 1500 m below its crest, the summit not being visible. The mountain is made up of typical ancient gneissic and granitic rock of the Cascades, and the north edge of the Mt. Lytton batholith is used to demarcate the boundary of the Cascade Mountains, which is the Thompson Valley. To the north the ridges of near equal height are underlain by younger volcanic strata ejected into shallow seas before uplift into the curiously named Clear Range, which lies at the south end of the Pavilion Ranges, known for climber-friendly limestones.

Historically, Mt. Lytton was climbed from the west side, beginning at the Kiska Native Reserve, which is about 4 km south of Lytton townsite. The trail is 17 or 18 km in length, rising 1400 m along a series of broad ridges, and winding among many small tarns in the alpine zone, to terminate about 150 m below the summit. It is shown on old federal and provincial topographic maps, but is not marked on new editions. An ascent of the mountain, using this route, was a test in endurance, and for several parties it would appear that they summited near the end of the afternoon. We found several campfire rings about the top, suggesting that overnight bivouacs were forced upon those who did not appreciate the magnitude of the task.

In the late 1960s, the classic route fell into disfavour. A large fire on the west slopes may have razed part of the trail, although the advent of logging roads on the eastern slope has provided a stronger incentive because it is a much shorter ascent from that side. These roads are in a high- elevation "through" valley of the Mowokhan Creek drainage on the south end

and the Nicoamen River basin on the north-east. The broad pass which connects the two is 1290 m above sea level; the main road from the south is marked "Ainslie Rd." on the TransCanada, located 11 km north of Boston bar. The sign is a misnomer, because Ainslie Creek is only a tributary of the Mowokhan, and it is a 27 km climb on a road of 2 to 3 lane width to reach the pass where an important junction leads easterly towards Mt. Zakwaski. The Nicoamen approach starts at a prominent waterfall in the Thompson Valley, climbing steeply through an efficiently hidden native reserve on the hillside above CP Rail. From this road system several spur roads, now in disuse, provide access to the upper slopes of the elongated massif of Mt. Lytton. The ridge system which makes up the Jackass Mtn.-Mt. Lytton trend sits as a western outlier to the main North Cascade trend, the latter of which blurs into rolling ridges that characterize the Interior Plateau to the eastward. Historically, this isolated ridge system was called the Lytton Range, but the name disappeared in the more recent treatises on the physiography of our western landscape.

Recent topographic maps have also played havoc with elevations in the range. Early maps (1957 and earlier) indicated that Mt. Lytton is the highest (2044 m, or 6706') being 1 m higher than Mt. Zakwaski, situated 10 km due east on the main Cascade trend. But newer B.C. Gov. maps (1970) have reversed the above picture. Added to the puzzle was the south summit of Mt. Lytton, which has the same contour (6700'), as the main north summit, but no early survey of its actual height. So another objective of our trip was to try and clear up the mystery and confusion on elevations. Norm brought his laser survey gear and his GPS unit for the task.

Before the scheduled trip two of us undertook a 'recce' to find the roads of best approach and a campsite. Three weeks prior to the scheduled trip, Bert and I left Logan Lake and descended the Thompson valley to the Nicoamen waterfall, and then began the ascent of the road through the native community, hidden under the ponderosa pines. Twenty-seven switchbacks later, the upper edge of the Thompson Valley wall

614660E, 1983 datum). Its elevation (1250 m) was about 50 m above main road level; the spur road climbed into a sprawling cut block which was located directly below the summit. The useable road wound its way up to 1500 m before alder regeneration stymied further vehicle penetration. To round out the day, the road on the Mowokhan (south approach) was descended to the TransCanada Highway, reaching it at 11 km north of Boston Bar. It is an extremely well-built and maintained thoroughfare providing good views of the Coast Mountains. All told the Mowokhan-Nicoamen through-valley road is 50-51 km in length in what is scenic terrain regardless of what direction is being driven.

On our official and classic October weekend trip, the 30th consecutive it might be noted, the phone queries began to ring two weeks in advance. Potentially it looked like a gang of about 20, but a sour weather forecast and last minute injuries dropped the ranks to 15 by Friday night and twelve actually showed up at the Boston Bar cafe on Saturday. Ed's van lost the route on the Mt. Lehman road in the Fraser Valley, and so they were left instructions at the cafe on where to find our campsite. They arrived just before nightfall with the campfire already ablaze. The predicted blow of weather was already upon us, with very gusty winds and clouds building up throughout the day. Seven of us decided to sleep in vehicles. Two violent blasts of wind during the night, however, managed to rock them awake, despite the surrounding forest which should have shielded us. For those who listened to the wind throughout the night, the breakfast fire could not be struck soon enough.

To speed up the ascent, the two 4-wheel drive vehicles in our convoy were used to climb the initial bushed-in grades of the logging road above camp, stopping at an old road intersection at the 1500 m level. The 'recce' route was hiked on a grown-in continuation of the road to a large landing, and a skidder trail was used to reach the top edge of the cutblock (el. 1580 m). At this point the forest canopy blocks out any views of the alpine area. A compass course set on 240° was used to wander through the rich autumn-coloured azaleas that blanketed the understory. Two of the party hung ribbons in order to find "our" logging road on return;

they did a good job. Ascending a steep slope, after crossing a tributary of the campsite creek, the azaleas gave way to patches of heather. Overhead, mists were streaming at great velocity through the tree-tops suggesting that a very windy skyline ridge was imminent. Where were we along this lengthy ridge of Mt. Lytton was the question? Another 500 m of dead reckoning put us out onto the open floor of a broad cirque, filled with fields of large blocky talus on its back slope. The outline of the basin matched the map, showing that we were about 200 m in elevation below the summit ridge of the main peak. So the compass course did actually work!

The toe of the talus in the basin was skirted towards a steep heather slope. A mound of soil about 1-2 m high and several metres wide circumscribed the toe edge of the talus, suggesting that the rock debris was pushing, bulldozer style, across the flat floor of the basin. Possibly alpine permafrost underlies the talus to assist the gravitational motion. The heather slope, wedged between two descending piles of granitic debris, was ascended to a very windy ridge top. We were met by a confusing array of minor ridges in obscure weather, together with many more lakes and ponds than shown on the topographic maps. Several ridges were ascended in the murk before the skies cleared sufficiently to show us a potential highest one to the west. However, it soon became two ridges. Ridge number 4, or was it 5, was thought to be beside the lake which appeared to match the outline on the map, but there was no brass survey monument, and according to the map it should have been there. The mists blew away for a brief spell to once again reveal a slightly higher hump to the west, sporting a fully-racked mule deer near its top. He took flight once we began to move. The final summit, reached in about 10 minutes, eased into a gentle dome covered with clumps of krumholz. Searching on the highest rock knobs failed to produce a monument, but there were several fire pits. Some old white cloth was spotted, and Gloria quickly found the monument mounted in a bouldery depression on alpine turf. The Topographic Survey of Canada had placed its brass plug at one m below the highest rock on the summit, and certainly in any position it would be an impossible

target to find from any distant survey position, even if a cairn had been erected at its position.

The cloudy shroud lifted momentarily to expose the Coast Mountains and the Mt. Skihist group to the west: Kwoiek Needle to the southwest, and Mt. Roach to the northwest – all backed by a solid bank of ugly black clouds. The view quickly disappeared. Norm, meanwhile, pulled some pitch wood from his pack and produced another lunch warming fire just below the summit. Meanwhile the skies lifted to the east to expose the dome of Mt. Zakwaski. This was the opportunity we had been waiting for; we could now survey for ourselves the conflicting elevation differences between the two peaks as shown on the maps. Norm energized his laser gun, focused its sights on the highest protuberance on “Zak”, which yielded a slight deflected angle of 0.22 to 0.24 degrees. We were higher, but curvature of the earth makes it even a shallower victory. And then a sighting to the south peak of Lytton; we were much higher, and a sigh of relief - we were spared a traverse over the multitude of ridges to reach it.

It was descent time, in quickly re-enveloping cloud. Obviously this was a mountain top where one could easily lose the way in the fog, or for that matter lose party members who were not staying with the group. The rim of the cirque was reached en masse, not taking any chances.

Some literally ran down the precariously steep heather to the floor of the cirque, whereas others, who did not have the accident or disability insurance to justify the pace, took their time. Surprisingly quick, the logging slash was reached, on target. Camp was dismantled in mid-afternoon. The second highlight of the day was the exit from the east side of the Mt. Lytton massif by way of the Nicoamen River. At the highway the gang dispersed, some towards Spences Bridge and others to Lytton.

The elevation confusion between Mts. Lytton and Zakwaski, given in the table opposite, clearly shows the 1 to 4 m discrepancy in elevations which plague nearly all summits in the Cascade Mountains of Canada. In this case they appear to leave it to the map user as to which of the two peaks is higher. Photogrammetric surveyor, Bill Tupper, who performed the earth curvature

calculations and retrieved several of the above survey data for us, advises that the TRIM map elevations are the more reliable with a maximum error of +/-2 m. Thus, Mt. Lytton is 2-10 m higher than Zakwaski. The years of confusion, however, could have been avoided if the BC and Army Survey Establishment surveyors had bothered to re-occupy the old survey station on Mt. Lytton. All surveys that took the trouble to take a shot at the south peak of Mt. Lytton confirm that it is lower than its north peak. Thus, the 6700' contour shown for it on the old maps is overly optimistic by at least 24 feet. For those who wish to navigate through a myriad of lakes nestled among the ridges of the north summit, only the TRIM map (scale 1:20,000) shows the full array with accurate outlines on each.

Participants: Ed Zenger, Ziff House, Gloria Fuster, Heinz and Emily Berger, Marilyn Cram, Norman Hansen, Bert Parke, John Sapac, Jenny Faulkner, one other (name lost), and Karl and Skoki Ricker (Organizer and camp guard, respectively).

Elevations of Mts. Lytton and Zakwaski

Source	Lytton	Zakwaski
1. Topographic Survey of Canada* pre 1957 (stns on both peaks) - S Pk.	2044.0 >6700'	2043.1 N/P
2. BC Dept. Lands - Topo survey 1969 (Stn on Zak. only) - S Pk.	2044 N/R	2045 N/P
3. Maps and Charting Est. 1970, Dept. National Defence (Stn on Zak.) - S Pk. (with trig. stn)	N/R 2034.8	2047 N/P
4. TRIM 1:20,000 map, 1994 (based on 1987 aerial photos. BC Survey. Res. Mapping Br. - S Pk.	2049 2036	2043 N/P
5. Our survey estimates GPS unit (high pk.)	2050	N/R
High pk. (using *)	2045	2004**
S Pk. (from high pk.)	2035	N/P

N/P = not present; N/R = no record.

*The survey stn. is located beside some rock knobs which are 0.9 - 1.0m higher, so 2045m is a revised elevation based on the earliest survey.

**The result corrected for the curvature of the earth (7.8m) is much too low. The deflection angle measured by the instrument (0.23 degrees) is 10-fold too much, suggesting an atmospheric refraction anomaly.

**Jackass Mountain – Anything But
27-28 September, 2003**
by Karl Ricker

Jackass Mountain, rising more than 1750 m above, and only 6 km away from, the Fraser River was a formidable obstacle on the Cariboo Wagon Road in the heydays of two or more gold rushes. The west side of the lower flanks of the mountain rise precipitously out of the river for 350 m where the Royal Engineers had to hack out a route in bedrock to the width of a team of mules or oxen which pulled overladen, iron-rimmed wheel wagons up steep grades to pass through the barrier. The rock here is of sedimentary origin, some of which is a massive and resistant conglomerate that made the construction work more difficult. Possibly, the rock fostered the name for the mountain, and certainly among the geological community the Jackass Mountain conglomerate (L. Cretaceous age) is a very familiar rock unit. But as always, there is a catch: this formation is confined to the immediate canyon, and the main higher massif to the east is underlain by an older (Jurassic) and locally very sound granitic rock – the Mount Lytton Batholith. So the mountaintop itself is named under false pretenses.

The plan, as the previous year with Mount Lytton, was to drive up to Mowhokam Creek logging road (advertised as Ainslie at highway level) and car camp more or less directly below the summit position of Jackass. Creeks were dry, the road was dusty, but the autumn colours were outstanding once out of the Fraser Canyon. After some hesitation on the water issue the east side of the road between KP20 and 21 became the preferred campsite on a short spur road. Gazing uphill to the objective's satellite summit, and all of the logged slopes between us and it, the quest began to find a way to the highest road in the cutblock.

Bert departed shortly to explore but returned reporting that the spur roads across the street were all horizontal and refusing to go uphill. After a campfire-less dinner, Ed and I investigated by going further north on the main road. At KP 22.1 a revitalized spur was reached, with construction machinery sitting at roadside. This branch road exceeded all expectations as it twisted 5.4 km up the mountainside, passing by a deactivated spur which appeared to have led to the high roads seen from camp. At 1810 m it reached a saddle on the ridge which runs from Mt. Lytton to the north (6 km away) to Jackass Mtn. to the south (also 6 km away). The steep road was re-built to access timber in the Siska Creek basin, lying below to the west. Not needing to go any further, the recession returned to camp just before nightfall with the satisfaction that 650 m of uphill grinding had been eliminated.

The Siska saddle was re-ascended on Sunday, with cars parked beside the heather. A pleasant game trail lead through the islands of subalpine/alpine trees reaching the crest of "Surprise Ridge" at 1925 m, and a good view of the 5 km long ridge crest leading around the south rim of Siska basin to Jackass. Three humps had to be ascended and descended along the way with the biggest drop being into a narrow saddle at 1700 m elevation about 1.5 km from the target summit. Ed, however, saw subalpine meadows below on the Siska basin floor and what looked to be a continuous carpet of heather descending almost to it from the northeast side of the summit. I nixed the idea of a direct approach because slopes to be descended on our side of the basin were covered in chest-high rhododendron bush mixed with a gnarly forest overstory. Descent and re-ascent to the next bump was easily done on the rim of an old cirque facing northeast – the access route if we had opted to begin the climb from camp level. This bump stands out as a peak on its own when viewed from the floor of Mowhokam valley and it was on Bert's direction we had been duped to begin the climb from there, so it was temporarily named "Bert's Wart" (el. 1915 m). Descent and re-ascent up and over the next two lower bumps (slightly lower than 1800 m) was without continuous game trails but heather glades mixed into the forest cover provided easy

hiking. The final drop to the low point on the ridge route was a bit testier – tight stunted evergreens mixed with patches of dense chest-high bushes. The route swung to slightly north of due west for the final 300 m re-ascent of Jackass itself. No problem – meadows enlarged as the easy hiking went uphill. Three California Bighorn sheep livened up the entourage. Then it was onto easy granitic rock (slightly gneissic) with patches of heather to reach a 20 m high cliff band. John led the charge up a steep gully to surmount it, but for those not so athletic a hand-line was rigged for comfort.



Hiking to Bert's Wart en route to Jackass Mtn. to right of photo. Photo - K. Ricker

The summit was only ten minutes beyond the obstacle. Oddly the only cairn was of a suspicious (and ancient) surveyor's style sitting on a lower bump which had been well polished by the continental ice sheet. Obviously, the sheet was moving parallel to the Fraser canyon, southeasterly in this part of the province. It was surmised that the surveyors wanted a better view into the canyon by opting for the lower bump. The question was - was the official elevation of 6588 ft or 2008 m for the mountain based on this surveyor's cairn, or had they corrected for the difference? Regardless, we constructed our cairn on the middle of three other higher bumps nearby. Obviously, the mountain is rarely ascended, if at all.

While cairn ceremonies were underway, Barry investigated the third bump nearby, finding a Dept. Defense survey monument that had been hammered into the turf on a long stake (MCE #70A 14A). Bill Tupper kindly looked up the record for

the monument finding that it had an elevation of 2006.8 m or 6584 ft. Our cairn was on a slightly higher knob, and so we concluded that the old time surveyors had indeed made an offset correction, contrary to what they didn't do on Mt. Lytton. The moral of this story is don't always believe the posted elevations of summits on maps.



Summits of Jackass Mtn., the lower with a cairn on ice-polished granite. Photo - K. Ricker.

At twelve noon, with the air temperature rising to 20°C, it was decided to try Ed's direct route back to "Surprise Ridge". The summit bounding cliff band was bypassed by going north, before swinging northeast to east on steep heather slopes to reach the floor of an open alpine basin. By staying to the south of a gully below it the hike downslope to the bog-covered floor of Siska basin (el. 1500 m) remained mainly on mixed heather and low shrub – the latter brilliantly russet in color. Going back uphill to our ridge route, however, was another matter – higher bush, covering the deadfall, mixed with tightly spaced subalpine forest – hot and sweaty going. By now it was two parties separated about 500 m apart searching for that easiest line. Ed's party day-lighted on the ridge connecting the two high bumps, while John's struggled through worse bush to reach "Surprise Ridge" direct, but his route was one half hour slower than Ed's who reached the cars at 1415 hours – only to find that Bert's vehicle had a flat tire!

Participants: Bert Parke, Ed Zenger, Jenny Faulkner, Jean Lederer, Barry Sopol, John Sapac and Karl Ricker.

New Approach: via N-S ridge crest parallel to Mowhokam Creek, over the tops of "Surprise Ridge", "Bert's Wart" to the mountain's east ridge

– no sign of former human presence beyond Surprise Ridge.

Lizzie-Stein Divide Area - Summer Camp 16-24 August, 2003

by David Scanlon

I'd passed by the glacier-clad peaks south of Stein Lake in 1992 – a most spectacular route. But was there enough to do to keep a group busy for a summer camp week? I wanted to start at Figure of Eight Lake, but the 12+ km with full packs seemed too formidable a task for some. So what to do? To take 2 days to get in would be a waste of a day. I thought of flying in our packs. We'll scoot in with just a daypack. We did. It worked. It took us about 6 ½ - 8 ½ hours to get in to camp on Saturday.

We all went the next day as a group to Vanguard Pk., which was a relatively short easy hike. We could see for km in all directions, Mt. Skook Jim and its glacier being most impressive. Karl, Ed, Max and Jeffrey, feeling energetic, went on over to Mt. Skook Jim. The rest of us hung out in the warm sun and enjoyed the views.

Monday morning – up and at em. Now we're getting into the swing of things. Groups were going in all directions – Caltha Peak, Mt. Cline, Mt. Skook Jim, and Tundra Lake.

Tundra Lake – all written accounts of Tundra Lake are similar – dark black and foreboding, at times resembling India ink. We all agreed we'd never before seen a lake like it. Tundra Lake drains eastward into the Stein River to Stein Lake, then again into the Stein River. Part of our group circled it and Caltha Mountain.

At night we could see Mars. But on Monday night – bonus! The northern lights were out. They were reportedly great. Reportedly, as some of us slept through the night, missing them.

Tuesday was a repeat of Monday with small groups going in all directions. One group of 3 went down to the foot of the Skook Jim Glacier where a small lake had formed. They found some snow caves and some oddities they called hoodoos – pillars of snow and ice about 1 m high covered with soil.

Remember the summer of 2003? The summer B.C. burned? Each evening we would see to the east huge, huge clouds rise into the

sky. (Or were they clouds?) Was it smoke? It seemed to be. Much debate ensued as to the cause of this phenomenon. I decided to call my daughter on Tuesday night for a weather report. A satellite phone does come in handy at times. After a quick weather report, I asked her about the smoke we could see. She said There was a huge fire north of Lytton; people evacuated. It was easy to guess what the topic of discussion was that evening.

The longest trip from this camp was to Mount Klackarpun overlooking beautiful Elton Lake. Six of us did the 16 km trek over and back. My objective for this camp was to get as many people as possible over onto the unnamed Mt. Skook Jim glacier and the unnamed Elton ice field. This is a relatively untravelled area well worth exploring.

Our next day, Thursday, was grunt day – time to move camp the 8-9 km back to Arrowhead Lake. Another obviously named lake. Just behind our tents we could overlook the Gates of Shangri-La and on down Lizzie Creek to see Lillooet Lake. This camp was on the main Stein Traverse trail and we began to see other people. They went on to confirm that the fires were as bad as my daughter had reported.

The next two days, Friday and Saturday, had us in all directions again. This is great hiking country and we all made the best of it. James and I got a little adventurous on Shieds Peak giving ourselves a bit of an adrenalin rush with a little class 4.

Overall, we didn't see much wildlife. Lots of ptarmigan, but, until Friday, no mountain goats. On Friday, the gang on Diversion Peak saw a female goat and her kid. No bears were seen at all.

Somehow Saturday came. The week just disappeared behind us. That evening we had our last day's end meeting talking about our last day, the past week, fires, family, food. Oh yes, food! We were all looking forward to lots of fresh food and coffee. Pictures were taken all around and then nothing happened. Nothing. No one spoke, no one moved. No one wanted to be the first to go back to our tents admitting our week was done. A long, long time passed as we all just sat with our thoughts before, one by one, we went to our tents one last time.



The Lizzie - Stein summer camp group. Photo - D. Scanlon.



En route to Mt. Klackarpun. Photo - D. Scanlon.



Snow ramp to Vanguard Pk. Photo - D. Scanlon.



The summit of Mt. Klackarpun. Photo - D. Scanlon.



On the summit of Vanguard Pk. Photo - D. Scanlon.

Sunday morning we all rose, packed, and hiked back to our cars with visions of plates of food and pots of coffee awaiting us. One car had a flat with the spare being almost flat but having

just enough air to get down to the Lillooet main line.

Our weather was superb for 9 days. The 15 of us climbed 15 peaks gaining over 64,000 m.

Once again a great time. New friends – old friends – new memories.

Participants: Trudy Rey, Donna Bailie, Karl Ricker, Peter Woodsworth, Marsha Ablowitz, Paul Ng, Mary Henderson, Diedre Sun, James Hardy, Alice Purdey, Fred Douglas, Ed Zenger, Jeffrey Zenger, Max Bittel, and David Scanlon (Organizer).

**Natural History Notes - Lizzie-Stein Divide
BCMC Summer Camp**
by Karl Ricker

1.0 INTRODUCTION

A Dave Scanlon-organized summer camp provides a broad variety of objectives for those who appreciate the alpine rambling style of terrain. Long climbs, short hikes, meadow strolls and even camp loafing, all pass through outstanding displays of flora, geology and scattered fauna. This year's camp, with the exception of the initial 1.5 hours of hiking through the upper forest zone, was in subalpine to very alpine terrain. The first base camp was located well-above treeline at 2000 m at Figure of Eight Lake. The shift to the second and final camp (Arrowhead Lake) was at the uppermost edge of treeline (1820 m) and the mixed meadow and stunted forest zone, or subalpine, descends to about 1650 metres, or just above the Lizzie Cabin at about 1600 metres.

The wait list to attend this camp was a staggering six months (a record?). Some who attended could only come on the stroke of one or two last minute cancellations. Those who came ranged in age from 16 to 67.



Karl studying. Photo - D. Scanlon.

1. General Geography

The camp area was on the Stein-Lizzie (and Rogers) divide which more or less coincides with the leeward-windward aspect, respectively, in the Coast Mountains. The Harrison-Lillooet valley to the west of this area is the usually recognized boundary between east and west ranges of this overall mountain system. The eastern are often denoted as the "Lillooet Ranges" on maps and in older literature. Lizzie and Rogers basins drain into the Lillooet and Harrison Rivers whereas the Stein is a tributary of the lower mid reaches of the Fraser. Major ice fields are fewer, and smaller in size, in the eastern Coast Mountains. The alpine zones are full of periglacial processes and related features, due to the more continental and drier aspects, than to the west. Elevations of most peaks in the immediate area are 2200 to 2600 m tending to rise eastward, culminating at 2957 m (Mt. Skihist), located near the east boundary of the Coast Mountains, which is along the Fraser Fault Zone. While valleys are deep to very deep, there is an irregular subset of hanging valleys near or above treeline that bring about an increase in walkable terrain around most ridge systems. Many of these "hangers" have lakes scoured out, brought about by the onset of regional glaciation through local cirque as well as trunk glacier activity. Lizzie and Tundra Lakes are two excellent examples of the hanging valley scour basin phenomena.

The biogeoclimatic zones traversed in the area are the following:

- Interior Douglas-fir (IDF): along the edge of Lillooet Lake, floor of Stein valley
- Coastal Western Hemlock (CWH): virtually all of Lizzie Creek valley up to half-way between Lizzie Lake and Lizzie Cabin
- Mountain Hemlock (MH): up to Arrowhead Lake from above the CWH
- Alpine Tundra (AT): from Arrowhead Lake to Tundra Lake
- Engelmann Spruce – Subalpine Fir (ESSF): Tundra Lake down to 1200 m (+/-) in the Stein valley
- Montane Spruce (MS): below the ESSF in the Stein Valley; not reached in camp activities.

Most natural history observations were carried out in the AT and MH zones, although the parking area at Lizzie Lake marked the beginning of the camp movements in the CWH Zone. One traverse party spent about a half day in the ESSF zone when hiking from Tundra Lake to Figure of Eight Lake via the Stein drainage. Geologically, most of the zones are underlain by granitic rocks of diorite to quartz diorite composition, with some minor exceptions.

1.2 Observations

Various camp members assisted in the work, which covered the obvious features only. Flowers and shrubs were identified by Trudy Rey, Alice Purdey and the writer using a flora handbook. Fred Douglas and the writer identified trees including the shrub forms. Birds were identified by several camp members, with the writer doing the IDs of their calls or of the more obscure ones. Mammal observations, what few there were, were made by all party members. Geological and glaciological features were by the writer, assisted here and there by others. Some aspects of the glaciology and glacial geomorphology of the region were published by the writer in CAJ, 1984, when he spent a few days at the Caltha Lake area in 1983. So this report might be considered partly as an addendum.

2.0 GEOLOGY AND GLACIAL FEATURES

2.1 Bedrock Geology

The geological map compiled by Glenn Woodsworth, on behalf of the Geological Survey of Canada, appears to be the only reliable source of bedrock information, despite the scale limitation of 1:250,000. Maps produced since then are at coarser scales of 1:500,000 and 1:1,000,000, both derived from Glen's map, although there are some minor revisions. At the outset of camp activity, which was hiking the trail from the parking lot through the forest to Lizzie Cabin, the route overlies ancient (Paleozoic) gneisses and related rocks, similar to those on Mts. Hollyburn and Strachan on our North Shore mountains – the so-called Twin Island Group. These rocks are nothing more than a “raft” which rode up on the

upwelling magmas of the Coast Mountain Plutonic Complex. Approaching the Gates of Shangri-La the gneisses give way to diorites, a granitic rock without much quartz, but with plenty of darker minerals that are crudely aligned (foliation) to provide a “pseudo-gneissic” appearance. The origin of the foliation is in question. Rounding the south side of Tabletop Mtn., enroute to Cherry Pip Pass, the granitic rock becomes paler and has more quartz, hence a quartz diorite, also foliated, and this rock type continues to the Figure of Eight Lake campsite and beyond to Vanguard Mtn. Locally, the rock is oxidized to a brownish or reddish orange, due to higher concentrations of iron-bearing sulphide minerals, especially at the east end of Tundra Lake.

Most of the climbs out of Figure of Eight Lake camp went east of Vanguard Mountain. If the objective was Mt. Cline the massive quartz diorite became increasingly platy due to a strongly developed vertical foliation which parallels the trend of its west south-west ridge. Nearing the summit, the quartz diorite becomes a breccia of angular fragments, and on the final hump before the summit the rock suddenly changes to a volcanic breccia with some granitic rock inclusions. The steeper slopes of Vanguard Mtn. to the east provide similar exposures. An oxidized zone in the granitic rock at the terminus of “Skook Jim Glacier”, gives way on the east side of the basin to volcanic rock, much of it hidden by moraine on the ascent to the skyline ridge of Mt. Skook Jim – “Sunblood Mtn”. This ridge is underlain by a three-tiered volcanic lava and breccia flow succession which dips gently to the northwest (Figure 1). The volcanics are of probable Miocene (mid-Tertiary) age, roughly 30 million years, or at least 2 to 3 times younger than the surrounding granitic rock through which the lava flows had been extruded. The volcanic rocks are made up of dacite to more viscous rhyolite, the rock types for the building of volcanoes. The age range of the underlying granitic rocks is not precisely known but radiometric dates so far are in the range of 70 to 110 million years, or Upper Cretaceous age. Within the area of the lavas which underlie all of the “Elton Icefield”, stretching from

Mt. Skook Jim to the headwaters of the Rutledge Creek area to the east, and downslope to the floor of the Stein Valley, the intense zone of reddish brown oxidation in the volcanics focusses at spectacular Elton Lake. This may have been the eruptive centre of the volcanic system and why mining companies have carried out intensive exploration programs about the lake area.

million years, erosion has stripped away any vestiges of the Cadwallader, and any other older or young rocks of island arc origin that may have covered the granitic bodies. That is, the Stein-Lizzie area exposes the “bowels of the earth” which have since been locally re-capped by the outpouring of the Miocene volcanic rocks in the “Elton Icefield”. Elsewhere, veins of quartz and



Fig. 1. From summit of Mt. Klackarpun looking to Mt. Skook Jim (left) showing tiered (3+) sequence of volcanic flows on the latter and recently exposed rubble of the former “Elton Icefield” extending downslope from both summits, which in the foreground has recently ablated from the trimline. Tundra Lake basin is in right background. Photo - K. Ricker.

The geologic time gap after the deposition of the Twin Island Group, an offshore oceanic volcanic ridge and marine basin sediments of Paleozoic age (230 million years and older), leaves about 120 million years before evolution of the granitic rocks. In this time interval plate tectonics was moving the ancient island arc unit eastward or north-eastward toward the continental edge of North America. Were there any rock units of post Paleozoic age in this time period? The absence of such on the east side of the Lillooet Valley suggests not, but on the west side there is a large area of marine volcanics and sediments, similar to the strata of the Bralorne area which overlie granitic rock, namely the Cadwallader Group of Upper Triassic age. So, after magmatic upwelling of granitic rocks, followed by cooling beneath a probable Cadwallader rock cover, the “unroofing” process began. Over the last 60

feldspars and dykes of volcanic rock have cut through the cooled-down granitic plutons. The prominent east-west dyke at Figure of Eight Lake is one of the more obvious examples.

2.2 Glacial Geology / Geomorphology

During the last 1.5 to 2.0 million years the Cordilleran Ice Sheet covered nearly all of the province in four or more events of significant prolonged climatic cooling, followed by warming. The Stein-Lizzie divide, part of an elongated and high ridge system, was an important contributor to the evolution of these ice sheet(s). The following geomorphic sequence of events produces an ice sheet:

- (1) glaciers develop out of snow banks which no longer melt away in summer – normally a cirque glacier;
- (2) small cirque glaciers continue to grow by

- elongation, becoming valley glaciers;
- (3) valley glaciers continue to lengthen, merging with others to form a trunk glacier;
 - (4) trunk glaciers lengthen and thicken to merge with one another filling up major valleys, becoming a "transection" glacier system (e.g. the Lillooet Valley from Toba Inlet through to the Fraser Valley at Chilliwack);
 - (5) ice levels in the transection glaciers continue to rise, reaching the elevation of the source cirque glaciers to yield a mountain ice sheet, pierced here and there by the bounding ridges of the cirques, i.e. a sea of snow with nunataks. During some glaciations almost all nunataks were buried and a "domed" ice sheet covered the province. In the above sequence, the landscape is scoured and gouged by moving ice, then modified by melt water erosion and the scattering of debris in the ablating ice to produce land forms in both bedrock and the overlying debris left in the wake of ice disappearance.

Tens of thousands of years later another climatic cooling event rejuvenated the same cycle, accentuating the landforms already eroded in bedrock and destroying those debris forms generated by melt water runoff. The last glacial cycle, initiated about 30,000 years ago, reached the development stage of an extended mountain ice sheet, peaking about 15,000 years ago, when ice pushed into Puget Sound. But by 10,000 years ago most of the ice sheet had melted out, leaving only a few residual glaciers in high and favourably oriented cirques. Since then, minor cooling cycles have rejuvenated glacier growth 5,000-4,000 years, 3,000-2,000 years and 500-150 years ago – the last often called "the Little Ice Age".

"Mega" features produced by glaciations are the anastomosing network of alpine ridges, the remarkable gouged-out trough of the Lillooet Lake valley (a fault zone) with classic U-shaped profile, and the deep U-shaped tributary valleys which lead from mountain ridges to the Lillooet. "Secondary" features honed out by the mountain ice sheets, or components thereof, are cirques, hanging valleys, horns (or individual peaks), cols or saddles, and other plucked-out lake basins that are not on the floor of cirques. Caltha, Shields and Tundra Lakes are in cirque basins. Lizzie

and Stein Lakes are plucked and abraded into floors of the U-shaped valleys, in turn surrounded by hanging valleys and cirques. Long Lake is a feature gouged out by the mountain ice sheet whereas Rainbow Lake, up-valley, appears to be on the floor of an older cirque, destroyed in part by subsequent abrasion of the overriding ice sheet. An identical erosional cycle appears in an adjacent basin. Arrowhead Lake has been plucked out by a valley glacier, whereas Heart Lake, up-valley, is on the floor of a "destroyed" cirque. Iceberg Lake has been plucked out of its eroded-out cirque rim which is now a broad saddle between Arrowhead and Tabletop Mountains. A chain of lakes, one above the other, developed by glacial abrasion so described is termed a "pater noster" series. Figure of Eight Lake is in another plucked-out basin located on a saddle, eroded by the mountain ice sheet, whereas the basin below it on the northeast side is on the floor of a cirque, which escaped complete removal by the overriding ice sheet. An often unanswered question is: "was the cirque glacier re-established after disappearance of the ice sheet"?

How high was the mountain ice sheet at its climax 15,000 years ago? Evidence for the presence of the ice sheet includes features of abrasion. Tynemouth Mtn., with rounded summit rocks, Caltha Mtn. with striations, and the bevelled top of Mt. Cline (Figure 2) indicate that the ice was at a minimum height of 2,200, 2,350 and 2,500 m respectively. Exotic rocks (erratics) left behind by the ice sheet provide another clue: the broken-up volcanic rubble on higher Mts. Skook Jim and Klackarpun (Figure 1), both 2,625 m or higher, were searched with no luck. The character of the rubble itself suggests that neither had been disturbed by an overriding and abrading ice sheet. However, both summits are on the upper rim of the present day "Elton Icefield" (Figure 3) which is about 11 km² in extent and extending up to only a stone's throw beneath these summits (Figure 2). The mountain ice sheet had to match the height of the present-day icefield, suggesting that it was a level surface at this elevation, perhaps locally with higher domes or rolls. The local icefield was likely a centre for radial flow of ice and hence not likely to have had any out-of-place rocks to disperse on the Klackarpun or Skook Jim summit



Fig. 2. The summit horn of “Mt. Cline” (left) and trimline (arrow) of the former upper level of the “Mt. Skook Jim Glacier” (right) from the summit of Vanguard Mtn. Photo - K. Ricker.



Fig. 3. Elton Icefield outlet glaciers from “Mt. Cline”. The glacier lake has an ice tongue reaching its right shore. Moraine (arrow) of the Little Ice Age extrudes well below the lake. Elton Lake is in the basin beyond the ridge that divides the icefield. Photo - K. Ricker.

areas.

2.3 Recent Glacier Trends

Glaciers and small icefields are presently confined to mainly north facing slopes, the prime exception being the west-facing glacier descending the slopes of Mt. Skook Jim and “Sunblood Mountain” (Figure 4). The demise of the glacier which once occupied the west side of

Caltha Mountain (Figure 5), facing south-west, had been studied previously (Ricker and Parke, 1984); 98% of its entire volume had disappeared between 1898 and 1951. A scant thin slab of residual ice was left on the uppermost headwall in 1983, which amazingly is still present.

The “Mt. Skook Jim Glacier”, roughly 2 km² in extent, is currently rapidly thinning. During the height of the Little Ice Age the glacier covered much of the south-facing slopes on the west ridge of Mt. Cline (Figure 2) – the ridge crest being only 30 to 40 m above the ice surface in the 1800’s. The lower reach of the glacier also filled much of the basin on the east side of Mt. Vanguard, with its terminus descending to about 1800 m onto a spectacular lake-floored valley which drains into Rogers Cr. By 1951 the terminus had melted back up to the outer edge or lip of the basin below Vanguard; the topographic map shows only 100 m vertical between the ice surface and summit at this time. Today, the basin below Vanguard is a lake lying about 250 m below its summit, filled with large icebergs from a rapidly retreating and calving glacier (Figure 4).

The lake located north of Crevasse Crag (Figure 3) in 1951 was about 150 m below the



Fig. 4. Mt. Skook Jim and glacier with recently (post 1951) exposed lake in foreground, from slopes of Mt. Vanguard. The floating icebergs are the buoyantly uplifted receding snout of the glacier. Photo - K. Ricker.

margin of a thinning "Elton Icefield". In fact, the thinning is shown by fresh wall rock and moraine which surrounds the feature. Thinning has also taken place at the top of the ice field, as shown by trim lines between the two summits of Mt. Klackarpun (Fig. 1). Surprisingly, however, a revitalized tongue of the ice now extends into the lake (Figure 3, arrow) from the ice field, suggesting a minor advance since 1951. A similar situation exists at Elton Lake which is obscured by an intervening ridge in the photo.

Signs of recent ice retreat are shown on all other glaciers. The more interesting example is the glacier at Moraine Pass (not shown on maps), located on the northwest side of Tynemouth Mtn. The glacier had an unusual snout outline when at its maximum extent. At the pass its lower reaches split, with one branch of the glacier sliding



Fig. 5. Caltha Lake and abandoned cirque with moraine of the Little Ice Age (arrow), taken from the east slopes of Tabletop Mtn. Photo - K. Ricker.

into the Rogers Creek basin on the east, while the other moved into the Rainbow - Long - Lizzie Lake drainage on the west. In plan view it was hammer-headed with a large moraine pushed against Arrowhead Mtn. This strangely configured advance occurred at least twice: once prior to the 1800's as a more extensive surge, and again in the late 1800's as shown by less weathered moraine and smaller lichen thalli diameters on exposed boulders. The glacier has now melted back against Tynemouth Mtn. leaving a lake-filled bowl at Moraine Pass, with icebergs on its surface. Hence, the development of yet more lakes in cirque basins continues. Certainly the Stein-Lizzie divide is dynamic in this respect, showing cirque basins with lakes, and no longer any sign of ice in the basin, hence development up to about 10,000 years ago, right through to lakes that are now in the course of similar evolution.

3.0 FLORA AND FAUNA

The BCMC camp was in late summer, which nicely avoided the bugs that we didn't want to identify anyhow. It was not the best time to witness prime biological activity. Furthermore, the heat of the summer had dried up the alpine berry crops, which were fine pickings for ptarmigan but useless for bears. Lush berries were confined to the shade of the forest below Lizzie cabin, and plentiful quantities were actually further below at access road levels. So presence of animals was low and much of the alpine floral display was already in wilted condition, and not easily identified.

3.1 Mammals

Surprisingly, no bears or signs of such (or other carnivores) were seen. Large game were also scarce and smaller rodents kept their distance from the base camps, although several unidentified species were seen while hiking and climbing throughout each day. The following were seen and positively identified:

- Pikas – surprisingly few but reported at Arrowhead Lake, in the valley east of Figure of Eight Lake, on the north shore of Tundra Lake, and possibly elsewhere.
- Red squirrel – several between Lizzie Lake and cabin.
- Northwestern chipmunk – several at Arrowhead Lake camp, one or two at Figure of Eight Lake camp.
- Hoary marmot – several on north shore of Tundra Lake, few in uplands and valleys east of Figure of Eight Lake, several between Heart and Arrowhead Lakes, and one at Rainbow Lake.
- White-footed deer mouse – one at Arrowhead Lake; probably numerous.
- Wood (Pack) rat – one allegedly seen by other campers at Arrowhead Lake.
- Black-tailed deer – tracks only, small-sized; assumed to be Coast (Columbian) subspecies.
- Mountain goat – fresh tracks on “Skookum Jim glacier” and on “Mt. Cline”; nanny and young kid seen high up on Diversion Mtn.

3.2 Birds

- White-tailed ptarmigan – family of hen and 6 juveniles at Figure of Eight Lake; another family between Figure of Eight and Vanguard Mtn., and 3 or 4 single adults on the same upland; 3 below summit of Caltha Mtn; family at Arrowhead Lake, 2 at Moraine Pass; 2 on Arrowhead Mtn.
- Spruce grouse – 1 on Arrowhead Mtn.
- Red-shafted northern flicker – 1 or 2 near Lizzie Lake on trail to cabin.
- Gray jay – 2 at Arrowhead lake.
- Steller’s jay – 1 at Lizzie Lake.
- Clark’s nutcracker – 1 at Arrowhead lake, 2 or 3 at Figure of Eight Lake, few at east end of Tundra Lake.

- American crow – 2 near summit of Mt. Skook Jim.
- Raven – 1 at summit of Mt. Klackarpun, 2 at Arrowhead Lake and 1 at Heart Lake.
- Chickadee sp. – several at Figure of Eight Lake and at Arrowhead Lake; no positive identifications but shyness points to Mountain species.
- American dipper – 1 in Lizzie Creek near cabin.
- Red-breasted nuthatch – 1 on trail to Lizzie Cabin from Lizzie lake.
- American pipit – 2 between Arrowhead and Caltha Lakes, 1 at Figure of Eight Lake, 1 at Tundra Lake.
- Robin – 1 at Lizzie Cabin.
- Varied thrush – 1 on Lizzie Creek road at base of final hill.
- Golden-crowned kinglets – few, near Lizzie cabin.
- Dark-eyed Oregon junco – 3 between Lizzie Cabin and Arrowhead Lake, many at east end of Tundra Lake, flock at Crystal Tarns, several at Lizzie Lake.
- Gray-crowned rosy finch – flock of 20-25 on Mt. Cline for several days, few elsewhere.
- Pine siskins – few between Caltha and Figure of Eight Lakes.
- Finch sp – 2 females (Caissin’s or Purple) at Figure of Eight Lake.

No raptors were seen or heard; waterfowl and shorebirds were absent on all lakes.

3.3 Flora

We did not identify grasses, sedges and mosses. Flora were identified with the help of Lyons and Merilees (1995).

3.3.1 Trees

- Subalpine fir (*Abies lasiocarpa*) – highest and stunted specimens at 2,175 m
- White-barked pine (*Pinus albicaulis*) – alpine species up to 2,200 m or higher
- Mountain hemlock (*Tsuga mertensiana*) – abundant about Arrowhead Lake
- Engelmann spruce (*Picea engelmannii*) – throughout area up to 2,175 m elevation
- Western hemlock (*Tsuga heterophylla*) – dominant tree below Lizzie cabin

- Amabilis fir (*Abies amabilis*) – few below Lizzie cabin
- Western red cedar (*Thuja plicata*) – few below Lizzie cabin
- Yellow-cedar (*Chamaecyparis nootkatensis*) – questionable I.D. below Lizzie cabin
- Western yew (*Taxus brevifolia*) – few small bushy individuals below cabin
- Alder undiff. (*Alnus* sp.) – tree sized, now invading decommissioned logging roads

3.3.2 Shrubs

Non-flowering Species

- Common juniper (*Juniperus communis*) – alpine area
- Arctic willow (*Salix arctica*) – alpine area
- Barclay's willow (*Salix barclayi*) – lower subalpine meadows
- Sitka alder (*Alnus crispa*) – avalanche swaths

Purple-flowering Species

- *Penstemon davidsonii* (Menzies penstemon) – alpine area
- *Empetrum nigrum* (Crowberry) – alpine area

Red-flowering Species

- *Rubus spectabilis* (Salmonberry) – at Lizzie Lake parking area, ripe!
- *Ribes lacustre* (Black gooseberry) – at Gates of Shangri-La
- *Oxycoccus oxycoccus* (Bog cranberry) – subalpine wet areas

Pink-flowering Species

- *Rosa gymnocarpa* (Bald hip rose) – at Gates of Shangri-La
- *Spirea densiflora* (Subalpine spirea) – subalpine area above Lizzie cabin
- *Vaccinium ovalifolium* (Oval-leaved blueberry) – forest below Lizzie cabin
- *Vaccinium caespitosum* or *V. uliginosum* or *V. deliciosum* (Dwarf or Bog or Blue-leaved blueberry) – subalpine to alpine
- *Phyllodoce empetriflora* (Pink mountain-heather) – alpine and subalpine areas
- *Arctostaphylos uva-ursi* (Kinnickinick) – alpine areas
- *Vaccinium vitis-idaea* (Ligonberry) – alpine

- *Loiseleuria procumbens* (Alpine azalea) – alpine areas, hard to find

Brownish-flowering Species

- *Menziesia ferruginea* (False azalea) – forest, below Lizzie Cabin
- *Shepherdia canadensis* (Soopolallie) – open areas in forest below Lizzie cabin

Yellow-flowering Species

- *Phyllodoce glanduliflora* (Yellow mountain-heather) – subalpine and alpine
- *Sambucus racemosa* (Red elderberry) – Lizzie Lake parking area

White-flowering Species

- *Ceanothus sanguineus* (Red-stem ceanothus) – open areas subalpine and lower, around talus slopes
- *Cassiope mentensiana* (White mountain-heather) – alpine areas
- *Rubus parviflora* (Thimbleberry) – Lizzie Lake parking area, ripe!
- *Rhododendron albiflorum* (Pacific rhododendron) – subalpine about Lizzie cabin
- *Oploplanax horridus* (Devil's club) – wet areas below cabin to Lizzie Lake
- *Vaccinium membranaceum* (Black huckleberry) – subalpine below Arrowhead Lake to Lizzie cabin
- *Sorbus sitchensis* (Sitka mountain ash) – Lizzie Lake parking area

3.33 Herbs

The camp was in late August and at the end of two dry warm spells. Hence the prime time for alpine flowers had passed and many species, already at seed stage, were missed. Thus, what follows only represents the late season species, a small percentage of the total. This is a guide to the more commonly-found flowers; some of the following identifications, therefore, are questionable and thus the use of the Latin abbreviation “*cf.*”, meaning “compares with”, if the guide appears to be too limited in coverage.

White Flowers

- *Petasites frigidus* (Alpine coltsfoot) – wet subalpine and alpine meadows

- *Saxifraga tolmiei* (Tolmie's saxifrage) – damp subalpine and alpine areas
- *Saxifraga caespitosa* (Tufted saxifrage) – rocky subalpine and alpine areas
- *Saxifraga bronchialis* (Spotted saxifrage) – rocky subalpine and alpine areas
- *Anemone (Pulsatilla) occidentalis* (Western anemone) – subalpine meadows
- *Leptarrhena pyrolifolia* (Leatherleaf saxifrage) – wet subalpine areas
- *Dryas octopetala* (White mountain avens) – dry alpine tundra
- *Anaphalis margaritacea* (Pearly everlasting) – Lizzie Lake Rd. to subalpine
- *Parnassia fimbriata* (Fringed grass-of-Parnassus) – wet to dry subalpine/alpine areas
- *Lutkea pectinata* (Partridgefoot) – scattered wet to dry subalpine/alpine areas
- *Valeriana sitchensis* (Sitka or Mountain valerian) – upper forest to subalpine
- *Erigeron compositus* (Cut leafed daisy) – dry areas, subalpine to alpine
- *Caltha leptosepala* (White marsh marigold) – not seen at Caltha Lake! Only in lower wet subalpine meadows near Lizzie Cabin
- *Tiarella unifoliata* (One leafed foam flower) – moist forest cover below Lizzie Cabin
- *Smilacina stellata* (Star-flowered false Solomon's seal) – moist forest cover below Lizzie Cabin
- *Stellaria longipes* (Long-stalked starwort) – damper alpine areas
- *Stellaria* spp. (other field chickweeds requiring taxonomic treatises to identify)
- *Lynchnis (Melandrium) apetalum* (Bladder campion) – dry rocky area at Gates of Shangri-La, not in identification guide
- *Achillea millefolium* (Yarrow) – Lizzie parking area to subalpine area
- *Antennaria racemosa* (Racemose pussytoes) – dry subalpine to alpine areas
- *Antennaria lanata* (Woolly pussytoes) – alpine areas near snowpatches
- *Senecio triangularis* (Arrow-leafed ragwort) – damp subalpine to alpine areas
- *Senecio canus* (Woolly butterweed) – dry mountain slopes
- *Solidago multiradiata* (Northern goldenrod) – dryer subalpine and alpine areas
- *Solidago spathalata var. nana* (Alpine goldenrod) – alpine areas
- *Arnica latifolia* (Broad-leaf arnica) – subalpine meadows
- *Arnica* spp. (Alpine arnica) – alpine slopes, damp and dry, could be 1 to 3 species
- *Potentilla flabellifolia* (Fan-leaved cirquefoil) – moist subalpine meadows
- *Pedicularis bracteosa* (Bracted lousewort) – moist subalpine/alpine areas
- *Sedum* spp. (Stone crop, 1 or 2 species) dry rocky subalpine to alpine areas
- *Mimulus tilingii* (Alpine monkey flower) – wet subalpine meadows
- *Castilleja cf sulphurea* (Golden paintbrush) – species of S.E. B.C., alpine meadows
- *Erigeron aureus* (Golden fleabane) – variable habitats, subalpine/alpine
- *Taraxacum ceratophorum* (Horned dandelion) – seen only on mountain tops!
- *Haplopappus (Senecio?) lyallii* (Lyll's goldenweed) – variable mountain habitat
- *Ranunculus* spp. (Buttercups) – late season ID difficulties, possibly *R. eschscholtzii* but other spp also probable – subalpine and alpine
- *Agoseris glauca* (Short-beaked agoseris) – dry areas, subalpine to alpine
- *Hieracium and/or Crepis* spp (Hawkweeds and/or Hawksbeards – with no patience to identify in dried out post-bloom stages) – exposed ground in subalpine/alpine
- *Erythronium grandiflorum* (Yellow glacier lily) – beyond bloom stage, subalpine meadows

Orange Flowers

- *Agoseris aurantiaca* (Orange agoseris) – subalpine to alpine meadows
- *Hieracium aurantiacum* (Devil's paintbrush) – roadside to Lizzie Lake
- *Castilleja hispida* (Harsh paintbrush) – subalpine areas and openings in forest near Lizzie Cabin

Yellow Flowers

- *Lysichiton americanum* (Skunk cabbage) – moist areas at Lizzie Lake
- *Senecio cf lugens* (Black-tipped butterweed) – several similar species, subalpine areas

Red Flowers

- *Castilleja miniata* (Scarlet paintbrush) – dominant paintbrush, subalpine and alpine meadow areas
- *Aquilegia formosa* (Red columbine) – moist areas in forest at and below cabin
- *Pedicularis groenlandica* (Elephant's head) – moist subalpine meadows

Pink Flowers

- *Phox diffusa* (Spreading phlox) – rocky alpine areas
- *Oxyria digna* (Mountain sorrel) – raw soil in subalpine to alpine areas, including the summit of Caltha Mtn.
- *Castilleja parviflora* (Small-flowered paintbrush) – alpine/subalpine drier areas
- *Epilobium latifolium* (Alpine fireweed) – alpine areas
- *Epilobium angustifolium* (Fireweed fireweed) – Lizzie parking area to subalpine meadows near cabin
- *Pyrola asarifolia* (Pink wintergreen) – moist areas above and below cabin
- *Mimulus lewisi* (Pink monkey flower) – wet areas, subalpine to alpine
- *Silene acaulis* (Moss campion) – wedged into alpine rocky areas
- *Pedicularis cf capitata* (Capitate lousewort) – alpine/subalpine areas
- *Erigeron peregrinus* (Subalpine daisy) – subalpine to alpine meadows, variable colours

Purple Flowers

- *Veronica wormskjoldii* (Alpine speedwell) – subalpine to alpine moist areas
- *Erigeron peregrinus* (Subalpine daisy) – see above
- *Cirsium edule* (Indian thistle) – rocky dry areas; Lizzie parking area to subalpine
- *Aster* spp. (Asters) -1 or more, *A. alpigenus* (?) or other not in field guide, *A. foliaceus* not seen in meadows
- *Phacelia sericea* (Silky phacelia) – dry rocky alpine areas
- *Penstemon procera* (Small-flowered penstemon) – dry rocky sites in the subalpine to alpine tundra in the Lizzie-Stein area

Blue Flowers

- *Delphinium cf menziesii* (Larkspur) – variable habitats, ours was small, in alpine tundra
- *Lupinus arcticus* (Arctica or broadleaf lupin) – forest to subalpine
- *Lupinus lyalli* (Dwarf mountain lupin) – alpine areas
- *Myosotis alpestris* (Mountain forget-me-not) – moist areas, subalpine to alpine areas

Green Flowers

- *Artemisia norvegica* (Mountain sagewort) – only at Gates of Shangri-La
- *Veratrum viride* (Indian hellebore) – moist subalpine areas and lower areas in forest openings

3.3.4 Fern

- *Pteridium aquilinum* (Bracken fern) – spotty but up to high alpine and on summit of Arrowhead Mtn.

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Mt. Rexford - Mountains for Millions

by Fr. Damasus Payne

Fr. Damasus Payne was from the Benedictine Monastery in Mission. He was an active mountain climber who went on trips with, and touched, a number of club members in the 1970's. He died in October, 1978 while taking a photo in the mountains. Jim Craig forwarded this account of an attempt on Mt. Rexford, accomplished the year before he died.

South of the border they are saying: "You have to stand in line to see anything beautiful in our state". Thirty years from now what will it be like here in Canada? The population will be doubled. Half the increase will be shared by three metropolitan areas – Vancouver for one. With all these mountains that hem us in, are we going to suffocate in our own scenery?

This problem didn't bother my confrere when he said: "I'm getting edgy in the classroom. I want to stretch my legs. Are you planning a mountain trip in the near future, if the weather stays good?"

The weather stayed good. We were off the next morning before the first class. Clusters of students, green-eyed with envy, waved us down the hill. It was Friday of the last week in September.

"Why couldn't we all go together", I thought? It is done in other parts of the world – in Switzerland for example, where school is closed down for the week during a good stretch of weather and everybody packs off to the mountains together. Maybe by the year 2000 we will catch up to some of those old country ideas that have proven their worth.

By the year 2000 I will be crowding eighty. The mountains can wait, but not I. I want to scale more of those friendly peaks that keep smiling down on us in the Fraser Valley. So when a confrere says in passing, "How about a mountain trip?" naturally I move heaven and earth, in a quiet sort of way, to oblige him.

This time it was just a matter of getting a substitute teacher and deciding which peak to scale. The Climber's Guide to Coastal Ranges of British Columbia lists 750 peaks. So there is wide selection.

Our choice was Mt. Rexford, the highest summit north of the border on Nesakwatch-

Centre Ck. Divide. It is reached after a 22 mile drive along the banks of the Chilliwack River. At the Ford Forestry Camp we turned south on a logging road that paralleled the Nesakwatch. After 5 miles of gradual ascent to the 3000' level, we were in a different world.

Neat sculptured peaks, newly dusted with snow and all in a line like houses of a suburb, greeted us. We were walking now because a giant fir had toppled over the road. It was 11 am of a warm clear autumn day. The sky was a flawless blue.

We liked this poor man's Banff with its friendly mountains that seemed to enjoy company, for they were close together. They had much of the dignity of that other celebrated spot where the peaks exist in splendid isolation for the better viewing of their finery by the speeding motorist. We found it easier to study the character of each mountain on foot. One especially attracted our attention.

We mentioned just now the subject of economy. Let me put in a word for the sport of mountain climbing that can yield big dividends of enjoyment for a modest outlay. I can't think of any sport, outside of shinney, that is less expensive. Lawrence and I left with two sandwiches apiece, plus two apples, that Friday morning. We returned Saturday noon having spent 60c between us on food and lodging. Of course we used 5 gallons of gas. But most young fellows can consume this much any Saturday night just cruising the main drag. When climbing mountains, you work hard for ten hours or so and tend to lose your appetite. At least that is our experience. In fact it doesn't return for another two days. Maybe that queen who told the hungry mob to go and eat cake should have sent them mountain climbing.

These outdoor narratives usually take one of three forms. There is the Paradise Regained story, the Death March and the Comedy of Errors. Actually to tell it as it is, you have to draw upon all three.

Good weather certainly made its contribution to our appreciation of the first. We were travelling during Indian summer. Great blocks of gold girded the mountains and streaks of red shot up their sides. A brilliant warm sun penetrated the ancient forest to its depths, driving away its gloom, transforming every needle into yellow gold. In

many ways these first hours of the climb were the best. We hoped that our pictures captured all that we saw and felt.

Of course we are grateful to the mountaineering club that took the time and trouble to lay out a trail and mark it so well. To walk through our forests under such favourable conditions is sheer luxury and delight. I am hoping that by the year 2000 most of our 750 peaks and more will boast a modest trail which is well-mapped, marked and located in relation to the more travelled roads of the province.

We had our sandwiches and tea on a bright patch of the moss that carpets this valley wall to wall. It was already 1:30 pm but we lingered, the spot was so pleasant.

Through the trees that were getting smaller now, we could make out the sombre form of the neighbouring peak. Mt. Slesse, well known and feared by people of the Fraser. I shared the popular prejudice. The real mountaineers, I suspect, do not. Even the laconic Climber's Guide lapses into rhetoric when it describes Slesse as a 'dark tower'.

Slesse is all sharp needles. It looks like a bundle of missiles perched on the skyline – a Cinderella shunned by sisters in ermine. "It's ugly", Lawrence said. "But I like it."

Slesse's estimated time for ascent from Nesawkwatch Creek is three days. The more approachable Rexford can be reached by a four-hour climb from the same creek – our Climbers' Guide informed us. We were anxious to make its acquaintance but were in no special rush to get to the top. Complacency, the number-one enemy in the mountains, was to be our undoing. And we had it with a capital "C". Things were never so good, we thought: good weather, good map, good directions, good trail. And I might add, good company.

I suppose Lawrence would not appreciate being compared to a calf led into clover – a fatted one at that – but I have to use cajolery to get my climbing partners. My sales pitch goes something like this: "It is just a leisurely walk. You don't need any professional competence, just a pair of good shoes and good lungs. It's a fun trip." Now all this is very true. There is no deception involved. Mountain climbing is the most rewarding pastime

imaginable as long as you confine it to the possible. There are plenty of peaks around that anybody in good condition can conquer. There are others of course, like Slesse, that required more skill. But is a shame to keep people home by lurid tales of tragedy in the mountains.

However, the "safe" mountains can be dangerous when we do not know them well. In thirty years, when most of their unknown factors have been eliminated, they should be safe for everybody. Ours was not quite safe enough. For one thing, I don't think our wonderful trail was even in existence when the author of the Climber's guide wrote his manual. So there was more than one fatted calf on the path that morning. We were headed for some trouble.

My theory is: By all means get to the top, or know the reason why, but enjoy yourself along the way. If it takes an extra day, well, so much the better. Lawrence hadn't read the small print of that contract. Today he has a sniffly nose and is wiser. But I don't think he holds any grudge. In fact he's walking around with a satisfied grin on his face like Leonardo's Madonna.

We're both camera buffs and friendly rivals, so were anticipating the moment when we would get a clear view of the countryside. The trail was steeper now, with many switchbacks on the ridge.

We wondered who was mutilating all the trail markers. "You mean vandalism has spread to our mountain tops?", I asked. "It's probably those camp robbers, the grey jays", Lawrence suggested. We got on to that old conundrum: Why do people climb mountains? "Why do people stand at the foot of mountains or anywhere on this globe", I asked? There is one tyro who came up with a good answer to both questions when he said, "Lord it is good for us be here".

Our moment of decision came at 3:30 pm when we arrived at an open streambed cut deep in the mountainside. We could see where it came through a gap of the cliff a thousand feet above us. Ordinarily I wouldn't chose to ascend a mountain by a route like that, but we had our marching orders from the Climber's Guide. It said, in the ten lines of text reserved for this mountain: "Ascend open creek bed until just under cliffs, then traverse south into a major valley." So off I went to reconnoitre. After each knee scraping, finger-

gouging detour, or squeeze through a slippery gap, I would say to myself: "They certainly didn't go this way. But just to be sure I'll go a little higher." There WAS a real gap ahead and the Guide spoke of a Notch between the objective and lesser south peak". I came to a rocky overhang. A gentle mist descended on me from the stream above. At one side there was a steep slippery sluice with a small amount of water coming through it which somebody might attempt, but not I. It was the end of the line and the end of the expedition too, so far as I could see.

I sat down near a block of old snow to take a picture. (It is good to have an alternate hobby in case the one you are pursuing goes sour.) It almost seemed that the old hag across the street, Mt. Slesse enjoyed my disappointment. If there had been anything else to photograph I certainly would not have wasted film on her. But there she was in dead centre between the sharp sides of the gorge I was exploring. It was a good enough subject. I've been looking for one like it to make a big enlargement for my room.

I found him on a boulder admiring our lady friend. "I guess we've had it", I said and waited for him to make the suggestion that we head for home. Instead, unexpectedly, he said: "Why don't we find the trail and go on for awhile?" That was a fatal suggestion – like saying: "Shall we dance" to a dervish.

We were on our way again. As you probably guessed, there was a yellow trail ribbon on the opposite bank of the gorge. We hadn't even bothered to look for it before. You see what I mean by being complacent? The one hard lesson you learn from the mountains is never to be absolutely sure that you are right.

About eight hours later, we would be glad to find this gorge and its stream again. Right now, though a bit weary, we were fired up with the prospect of at least laying eyes upon the mountain that was eluding our acquaintance. The terrain at this point began to conform to the description of our Guide. We traversed into a major valley. And as the text directed, ascended "scree and meadows until immediately below notch between objective and lesser south peak."

With myrtle bushes a fiery red, the mountainside seemed to be assaulted by shoals

of wayward sockeye come up to spawn. The sun, just touching the top of Slesse, matched their hue. On our left was the grey-tan granite of the summit ridge – smooth as the side of a doe. It was intersected by faint regular lines as though the workman who quarried here had slightly overcut his mark. To the right of our meadow, in the valley below, were giant dressed stones waiting, it seemed, for a builder of genius to come and erect a mighty temple.

The sun was slipping behind Mt. Slesse now and we dug our toes into the scree with more determination, trying to out-distance an ominous shadow moving up the mountain like a marauding bear. Above us was the citadel of Rexford bathed in blood.

We dropped our packs in grass next to the granite wall to speed our ascent of the last five hundred feet. Our immediate objective was a gentle shoulder beneath the walls of the citadel and separated from us by the valley filled with hewn blocs. Both the citadel wall and the boulders grew in size as we approached, confirming what we already realized: that heights and depths and lengths are deceptive in the mountains. I tried to encourage Lawrence by saying, "The peak is ours. We have only the height of two bell towers to go. After a long silence he replied: "We've climbed five bell towers already."

The sun, escaping the clutches of Slesse, was plunging down its slopes. Stolid white monarchs to the south – Larrabee, Baker, and Border Peaks, witnessed the fiery death. To the north, Robie Reid stood guard over our home at Mission, already bedded down at its feet beneath a purple blanket.

On reaching the shoulder I saw the "Large, easy gully descending from the south ridge of the north peak", as it was described in our handbook. Its elevation on the map was given as 7200', while that above me was 400' higher. The Climber's Guide, which I think more correct, reversed these figures. In any case I decided to have a try at the south peak which was closer.

Skirting around the walls and into a dark cul-de-sac cut off from the glow in the west by a parapet of the citadel, I tried to find an easy route of ascent.

I would have sensed danger if it had not been

for my overriding ambition to get to the top. The terrain was the same as described: boulders in the valley and what looked like the side of a quarry on my left. A mountaineer good at rockwork and with the right equipment would like this area. I liked it myself and began stepping from one ledge to another. The mountainside was shingled with large slabs of granite by some apprentice I thought, for he had started at the ridge-pole and worked down so the butt end of his shingles were facing up. These were what I was standing on.

I had every hope of reaching the top. It was only 50' away. Then I realized that the granite slabs were getting larger and farther apart while the pitch of the mountain was getting steeper. Maybe in broad daylight and with more time I would have found a way through. But it was getting dark. I considered it the better part of valor to call a halt. I had gone too far as it was.

Have you ever experienced that sinking feeling that comes when you have just slammed the door and left the key inside? That's how it is to put your foot down on a sloping ledge and realize you can never go up again. It describes my situation in the cul-de-sac. Standing there flat against the wall and considering what to do, it was even hard to breathe without upsetting my balance. I examined the sill again. What a relief to see that the quarryman had overcut again. There was a neat little saw mark that provided hand holds to a safe chimney 20 feet away.

I paused long enough on the rocks below to get a time exposure of the western skyline. It looked like a giant transparency already – bisected from north to south by the after burn of a rocket. I thought of the SIXTH DAY when God wrapped up his creation with a bright red ribbon and set it aside for Christmas.

"And God said, "It is good." These mountains of his are very good. Why then do they have such a cruel reputation? Do we make them cold and cruel by our uncalled for advances? I asked myself this question while threading my way through the boulders in the dark towards the grassy ledge where Lawrence was waiting.

Mountains aren't meant to be the grim forbidding things we credit them with being. They are friendly neighbours with their own sense of humor once you get to know them. This mountain,

we noticed, had its own happy sounds. Crowds of chattering camp robbers and chickadees had followed us along the trail. Even the occasional rockslide had a busy sound about it. In the darkness on that ledge where we had cached our packs, another welcome sound came to my ears: the trickle of running water. I had a bug light made from a coke can and a candle and began to investigate the hillside. I found the trickle of water where the granite met the grass and filled a thermos. Lawrence had settled down for the night already but I persuaded him to move down the hill where at least we would have fresh running water.

We were undecided about attempting the trail at night. For one thing, where we were there was no trail. And even with the four cell flashlight we packed it was difficult to find the way. But it was cold there on the mountainside with just a wool shirt and no sleeping bag. Anything is better than shivering for ten hours in the dark. So we floundered around amongst the rocks and brush for a couple of hours trying to find a trail marker.

Suddenly Lawrence flashed his beam at three rocks piled one on top of the other. While climbing up we had joked about the fanatic who had stacked up the rocks. "He must be a graduate of Singsing" Lawrence quipped. But now he said: "Boy am I glad to see those rocks." It wasn't all roses from here on in. You are quickly reminded in the mountains that there are 360° to a circle and the trail markers can go off at any angle.

By one o'clock we were back to our gorge of the afternoon with its abundant supply of refreshing water. Once again we decided to settle down for the night, but not for long. There was a chilling breeze coming down from that block of ice above and I was lying in half an inch of water. We moved out of the drafty gully into the scrub where it was warmer and drier. After twenty minutes or so we had to stop again. The flashlight had given out. We were on a steep part of the trail, but there was room for at least one man to be comfortable in a small depression on the mountainside. Our wall-to-wall carpet of moss had become more like a hanging, but Oh, was it comfortable – til the breezes began to blow.

I got out my bug light and started to gather wood. Before long we had a good fire and solid

comfort for the night, if you like sleeping against the wall. Several times we had to retrieve the campfire that had rolled down the mountainside.

“Too bad we don’t have any tea”, Lawrence said. It was. And a shame too. For there is nothing like it to help you pass the long evening before the campfire. We talked about the things we would like to eat.

Towards six the stars began to go out one by one. By the half hour I could make out the form of our sleeping neighbour Mt. Slesse. It was a welcome sight. We ground the ashes of our fire into the wet mud below the moss and started down the trail by seven. How very much longer a trail seems on the way out, even when the slope is in your favor! It was easy to make out the tin tree-markers now. We had no problems again and began to enjoy the walk.

In that half light of early morning we were like stage hands who visited the set of yesterday’s brilliant performance. Twenty hours before we had lingered here when the sun seeped through every chink of the forest and saturated all that it touched with gold. The sun, that star performer of this greatest show on earth with the longest run, was up early too. We saw him kiss the pale cheeks of our Cinderella. She blushed, and I took more kindly to her.

By nine-thirty we were striding through wet thimbleberry, alder and fireweed of a decimated forest. We were close to the logging road and our bus. Lawrence remarked: “Well there is your mountain”, meaning, I suppose, “Have a last look”. She was beautiful. I took a snap, as you would of a new friend that you would like to meet again.

Some young men with rifles gave us a two gun salute from across the valley. Their companions on our side dove for shelter. “Where ya been?”, they asked. “To the top of Rexford”, we said. “See any game?” “Just some bear dung”, I answered. “Some bear what?” Lawrence supplied him with a more familiar term. “I didn’t know what the fuzz you were talking about”, he said and then shouted across the stream. “Hey Mike! What did you get?” “A grouse, but I can’t find it.” “You can’t shoot grouse with a 306.” There’ll be nothing left.” “I shot him in the head”, Mike said. “Well, don’t shoot these two guys walking down the road.”

It was good to be in civilization again. We carried back more than was in our packs. We shared something that will keep us together when other things would pull us apart. We returned with a vision of unspoiled beauty, harmony and peace, in such overpowering abundance that we recognize their forms more easily now in our own surroundings. After a few scrapes and chills, pangs and frights, we learned to say with that tyro at the top of the mountain, and here at the bottom as well “Lord, it is good for us to be here – just to be alive and have our bones warmed by your morning sun.”

We will return again to Rexford and bring others with us. Not to escape the rising tide of humankind, but to share with them, something that is theirs, something they have missed and are looking for. In the mountains they will meet neighbours they did not know and have not trusted. They will discover grit in themselves, humor and humility.

Thirty years from now in the year 2000, when I am crowding eighty, I might be back again, since climbing is an art of the possible. In any case I’ll have this day in color, on tape and recorded in my memory as one of the better mountain trips.....In this sport though, as you will discover, the last peak to try your strength and skill is always one of your better mountain trips.

**Edge Peak,
7-8 June, 2003**
by Jos van der Burg

“Hey guys, it’s already 5 pm.” I shouted as they were setting up a running belay for the last 30 m up a narrow steep snow arête leading to the summit. The top being this close was like holding candy in front of a child. The top had to be reached. We all knew very well that we were coming off the mountain in the dark. It was just a question of where darkness was going to over take us. “ We will be on top in 15 minutes” shouted Emanuele.

The day had started out innocently enough. Ten people met at the West Canyon parking lot in Golden Ears Park at about 7.15 am under beautiful clear skies. At 7.45 we were all on our way up the trail. Reinhardt raced ahead on his



Edge Pk. with the white dyke starting at the top of the avalanche debris. Photo - L. Kost.

bike for the first 3 km which are fairly flat. Because he was the oldest he needed the advantage, he explained. He used that excuse more than once throughout the day but we knew better at the end. We were making good time and we reached the Alder Flats in just over an hour. From there we got a glimpse of the route and it looked like we were in for some surprises as there was still an abundance of snow. We found a good route through the avalanche funnel and its slide alder, first by following mature forest on the right side and then following the creek bed for the rest of the way. This will take you to the avalanche debris accumulation zone below Edge Pk. We climbed easily up the debris to the start of the white dike - a prominent feature of a narrow ribbon of light colored rock visible from a long way away. We were all taken aback by what we saw. Water was streaming down the rock on either side of the dike and it all looked very slimy.

Here things started to get disorganized. Brian was the first to take the lead straight up the dike but got hung up about 30 m off the ground. At the same time Reinhardt took another rope and led up the right side of the dike. Larry got impatient with all the delays and started soloing up. In the meantime Emanuele took the other end of the rope that Brian was on from Andrea and started leading up the same route as the one that Reinhardt was on. I started to get impatient and started soloing up the route as well.

There weren't many places to put protection so small trees were used. I passed Emanuele at the first station. Higher up I caught up with Larry who had set up a second belay station which mainly consisted of his body wedged in a groove. From up there it became impossible to figure out what was going on below because communication was very difficult with the noise of all the rushing water. Andrea had one minor fall down the slippery rock on the first pitch while on belay. But in the end everybody made it up to easier ground to where we were or so we thought. We scrambled, now unroped, up the rock. As we went higher we came to the snow clinging to the steep rock. Ice axes came off the packs and route finding began around the deep moats that had developed where the snow was creeping down the steep rock. I think we all prayed that the snow wasn't going to let go with us on it. It became a mixed route of snow and rock and finally at around 4 pm we reached the col between the Golden Ears and Edge Peak. It was hot and sunny and the group was clearly contemplating how things were going but nobody said it out loud. We still had about another 150 m of steep snow to the top. That would take at least another hour. With the summit within sight there was no stopping some. Come hell or high water the summit must be reached. And to be honest, after all the hard work we had gone through, we deserved it. Phone calls were made to loved ones to let them know that this was not to be an early home coming. Three decided to stay behind and enjoy the sun while the rest of us decided to go up on one rope. At first I decided to stay back as well but I started up on my own to show the way to the rest of the group. At the point where I was about to turn back Emanuele convinced me to go up with them and I clipped in. So early in the season, and a fading memory, made it difficult to remember where the route was supposed to go but the steep snow seemed a logical route and it took us to the false summit.

The final 30 m from the false summit took another half an hour to overcome. It was roughly 5.45 pm when we were finally and truly on our way down. A running belay was set up down the steep snow. In the meantime I was hoping that Reinhardt (who was one of the 3 who had stayed behind) had set up a rappel down the col to get



Jos et al. near the Golden Ears - Edge col.
Photo - L. Kost.

over to the Golden Ears trail. That was going to be our way down. But rappels take time, a lot of time. When we came down to the rest spot we noticed that, indeed, they had set up a double rope rappel down the cliff. Reinhardt was already part way down and was scouting out the rest of the rappel. The rope reached and he was down. It wasn't long before he realized another rappel was needed. Ten people, 2 rappels – it was going to be a late night. After 4 people had done the first rappel it was decided to rappel the second one on a single rope. We had 3 ropes between all of us, but to speed up things we had to do it this way. In hindsight it was not the safest way to do things, but it worked. It wasn't until 8.30 pm that all 10 of us were down and on the shoulder below the Golden Ears. One blessing was all the snow still on the ridge down to the old cabin on Panorama Ridge which worked in our favor. We passed the new shelter just below the permanent snowfield

and ran and slid our way along the ridge. Our goal was to get as far as possible before darkness. Anybody who has been on the Golden Ears trail knows how bad this trail has become and it can't be called a trail anymore. The long days of June worked in our favor on this evening. It was back at the Alder flats where the headlamps had to be put on. After waiting for half an hour for the last 2 to show up we had to tackle the last 6 km in the dark but at least the trail was easy to follow. The few people who did not have a headlamp (including the organizer) were put in the middle. Finally, at 1 am, we reached the parking lot. After 17 hours we all had sore muscles and aching



Brian leading a rope at the start of the white dyke. Photo - L. Kost.

bones. It had been an interesting day to say the least, with more difficult climbing than expected mainly due to the early season. The snow and



Jos and Reinhardt on Edge. Photo - L. Kost.

running water were the main reasons for the added difficulty. Late in the season you will only encounter rock from top to bottom. A strong and determined group made this a memorable day and thanks to Reinhardt for organizing it.

Participants: Dave Buryniuk, Julien Henley, Stanley Clark, Larry Kost, Brian Cashin, Chris Brohart, Emanuele Porra, Andrea ?, Reinhardt Fabische (organizer), and Jos van der Burg.

Yosemite Pinnacle – Left Side

by Anders Ourom

The B.C.M.C. has a lot of history. Members have long been accomplishing amazing feats, both in the context of when they were done, and in

the bigger picture. Standards are always subjective, memories somewhat elastic, equipment and techniques improve, and apples come to resemble oranges with 20-20 hindsight. For all that, some climbs will always be a challenge. This article juxtaposes two ascents of the left side of Yosemite Pinnacle (“LSYP”), on Tantalus Wall in Squamish. The account of the original ascent, from the September 1966 BCMC newsletter, is in italics; an account of a 2003 ascent in normal type.

The first ascent of LSYP was by Glenn Woodsworth, Hamish Mutch, and Mavis McCuaig, in 1965. Glenn was then in his mid 20s and a very fit, strong rock climber and mountaineer. The year before, he and Dick Culbert did the first ascent of Serra V, one of the great challenges of the Coast Ranges, and in 1966 Glenn and others did the first ascent of University Wall. Glenn had a major role in the “Climbers’ Guide to the Coastal Ranges of British Columbia” (1965), and wrote “A Climber’s Guide to the Stawamus Chief” in 1967. Hamish was also a very fit, strong climber, and had just returned from a long stay in Yosemite.

Hamish and Glenn were very active climbers and members of the BCMC. Glenn contributed to many guidebooks, and became a sort of eminence grise of coastal mountaineering, as well as an honorary member of the BCMC. Hamish became a teacher, and recently retired after many years in Creston, but is still an active climber. Mavis was, with Hamish and Glenn, an active member of the VOC, part of a group of climbing friends, and not a bad climber either.

Brian Kuchinka and I climbed LSYP in late September 2003, after the forest fire closure was finally lifted. We had an interesting time, on a very hot day – over 30° in Squamish. Both of us have climbed for many years, sometimes at a respectably hard level, Brian especially. We thought LSYP might be an interesting adventure.

I joined the BCMC in 1971. My parents were members, and I remember a hike with my father and siblings up the backside trail in about 1965, as a reconnaissance for a trip my mother was to lead to the “Squaw”. I sliced my hand open on a rock, and we retreated. Not for nothing was I once known as the mighty hiker. Later I helped with the Province hikes at the Chief. My first route at

Squamish was with Eric Weinstein; we climbed Mushroom, on the Papoose, on New Year's Eve 1972. A modest two pitch aid route, snow-plastered. We took all day to struggle up it, as my father, who gave us a ride, waited at the Klahanie.

We now have no shortage of equipment and skills, and places and chances to use them. Kernmantel ropes, nuts and camming devices to fit just about anything, sit harnesses, sticky soled shoes, and so on. There are books and videos showing one how to climb, courses of all kinds, and many to learn from. In 1965, they had laid ropes, tied in with a bowline on a coil, did body rappels, and perhaps had Kronhoffer shoes. You learned from friends and club-mates, as there weren't any books or courses. Climbers then had broad horizons and experience, and regular contact with role models to learn from. But their equipment and techniques were in many ways inferior to those of 2003.

Unlike most cities, Vancouver is fortunate in having within easy reach a huge chunk of steep, firm rock - the Chief. Inevitably, rock climbing is growing at an accelerating pace, and will become increasingly more important in the life of the BCMC and its members.

This was and is largely true, although during much of the late 1970s and 1980s there were relatively few BCMC members who rock climbed at any great standard. Fortunately this has changed, and the skills of many members have risen.

Rock climbing at Squamish is different from most other climbing areas. Lack of holds and cracks limit the possible route lines and chimneys are common; face-climbing is rare. Surprisingly enough, only about twenty of the sixty or so routes in the area are predominantly artificial aid. The rest range from easy class 4 to downright desperate upper fifth class. Climbing on the Chief looks dangerous, but is every bit as safe as ordinary mountaineering. Objective hazards such as rock fall and weather are greatly reduced; subjective dangers such as overconfidence can be lessened through proper technique and an appreciation of one's limits. Falls are not unknown, but only one accident has led to hospitalization, and that happened on a boulder, twenty feet off the ground.

In the early 1960s, Yosemite erupted as the centre of world rock climbing. By the middle of the decade, its big walls, long free routes, and crack climbs were acknowledged as some of the best and hardest in the world. Many developments in technique and equipment originated in Yosemite, including methods to climb, if not protect, the awkward, strenuous squeeze chimneys and off width cracks the area is famous for. Squamish climbers were aware early that the closest comparison to climbing there was Yosemite; Jim Baldwin and Ed Cooper, who did the first ascent of Grand Wall, later did the first ascent of Dihedral Wall on El Capitan. Free climbs at Squamish were long undergraded; until the early 1970s, Diedre was considered 5.4, Snake 5.6, and so on. (Now allegedly 5.8 and 5.9.) Climbing at Squamish was and still is much safer than mountaineering, particularly backcountry skiing, but with the growth in numbers, there are frequent accidents, and at least five fatalities so far.

A recent "Summit" article to the contrary, most climbing around Squamish is done by local climbers. Indeed, Vancouver climbers have established almost all of the many fine medium-length routes, many of which have free climbing of a high order. One of the more difficult and spectacular of these is the Yosemite Pinnacle (left side) Route, first climbed in October by Mavis McCuaig, Hamish Mutch and myself. This is not a pinnacle in the usual sense of the word, but rather a huge, detached flake lying against the wall. There are a number of these on the Chief; this one is located just left of the popular South Gully.

Summit was one of two U.S. climbing and mountaineering magazines in the 1960s, the other being Off Belay. Both vanished long ago. I suspect the Summit article that Glenn refers to was by Fred Beckey, who did many new routes at Squamish, but tended to disregard or even disrespect the efforts of Vancouver climbers. His later article on Unfinished Symphony claimed that it was "an entirely new route" – when over half had earlier been climbed by Vancouverites. The guide shows that many mid-1960s routes were by Canadians, although Fred & friends did several outstanding longer routes.

The top of Yosemite Pinnacle is about 120 m off the ground. In geological terms, it's a giant semi-detached exfoliation flake. The right side is a conspicuous wide crack, later called Tantalus Crack, part of Tantalus Wall, which was climbed a year later. LSYP is a north-facing corner, which gets little if any sun. The left (main) wall of the corner is pretty much vertical, and there's a crack of varying width in the corner itself.

We hadn't really expected the climb to be very difficult. However...a short rope toss led to the base of the left side of the flake. Hamish, just back from the endless miles of Yosemite cracks, led sixty feet of strenuous chimney and jam crack (class 5.7) to reach a good belay tree. I joined him, sweating, then led the only class six pitch on the climb; fifty feet of straightforward nailing. Mavis joined Hamish, who moved up to my rather dubious belay. The next pitch looked really bad. After ascertaining that it would go, we rappelled out (it was getting late), leaving our ropes behind.

A tricky high step gets you off the ground, then a short forest leads to the base of the pinnacle itself. A blank face, with a bolt or two for aid, and a mantle across to trees led to the base of the corner. I'd tried LSYP in 1974, with Eric Weinstein, and then did a rope (hammer) throw here, but only got a half pitch higher before it started raining.

The first pitch involved climbing to the base (top) of a nice cedar, up some scruffy stuff. There was a wide crack above, too wide to jam and too narrow to get into. (The 'strenuous chimney and jam crack'.) Luckily there were bits of flakes and cracks on the left wall, and with some fiddling we got some little nuts in. Stemming and thrashing led to a rotten Douglas-fir stump, garlanded with old slings. This was a healthy tree in 1974, which we rappelled off. Above was the section which Glenn aided, a nice 5.10 finger and hand crack up a steepening corner for perhaps 15 m, to another fine cedar. There was a stance on its top, where I belayed. The first pitch had been varied and adventurous climbing, and a nice challenge, even if I was slow. Another sling-festooned rotten Douglas-fir stump was just above, then a wide crack with some chockstones, which looked just wide enough to get inside. Not that this was my problem – I wasn't leading.

I'd never heard of anyone else climbing LSYP, and was surprised to find all the slings. They can

only have been from parties retreating, and from them I guess there had been six or eight attempts. Since the climb, I've enquired, and have heard of one other party which climbed the whole thing, and no one who admits to having tried it. Six or eight attempts over 40 years, and perhaps 2-3 complete ascents, isn't a lot.

Next day found us prussiking up the ropes to our respective stations. The next lead was classical: a ten inch wide jam-crack chimney affair, overhanging more than enough. Hamish somehow moaned and groaned and struggled his way up the first twenty feet of the squeeze-chimney (class 5.8) and then, gasping like a fish out of water, pulled himself onto the first chockstone. After forty feet, slightly easier (but not much), we heard his welcome "off belay". With a liberal expenditure of energy I managed to claw my way to Hamish's belay. He was standing on a chockstone deep in the chimney, anchored to a little tree that must have had a hard life, for it can never have seen the sun.

Brian arrived at the stance, and we switched over. He wasn't quite as sanguine about the prospects as I, but geared up and set off. The mantle onto the rotten stump was exciting, as there was some prospect of it detaching, and climber and stump would then have landed on the belayer – me. It hadn't occurred to us that helmets might be useful on a chimney climb. Brian got onto a perch above the stump, and with some fiddling got in some gear. The clean imposing crack rose above. Desperate thrashing ensued, as he did all he could to stick in the crack, and advance up 'the first twenty feet'. It was quite something to see. Eventually, he was able to wriggle within range of an old sling hanging down from the lower chockstone. With a bit of help from it, he millimetred up, and after a great effort was able to get on the chockstone, and in the chimney – it was just wide enough by then. He was gasping, too, and took some time to catch his breath.

Off-widths and squeeze chimneys are inevitably strenuous and awkward, and take special skills and determination. They're also very difficult to protect, and to grade. Glenn says: "I remember it being more strenuous and awkward than technical, and we were in good shape in those days. I suspect the old-style

grading was in play, but then I always did tend to over-rate cracks and under-rate slabs.” They called it 5.8; nowadays this pitch would be called 5.10, at least. Neither Brian nor I could possibly fit in the lower few metres of the off-width; Glenn says “Hamish led that pitch free. We were all slimmer then.” At the time, this was probably the hardest free pitch in B.C., and so in Canada.

The little cedar, I am happy to report, is still thriving deep in the gloomy recesses of the chimney, where it is well-watered and protected from ice and rock fall, not to mention direct light.

As an interesting side-note, in 1967 Glenn and friends did the first ascent of Pipeline on the Squaw, another wide crack. Learning from experience, they innovated. Glenn says: “We made two styles of pipes: one out of old-style TV antenna (the kind that used to sit on roofs) and a more durable kind that probably came from pipe supplied by your family. I vaguely remember going to your place to get the stuff. Anyway, we made them up in several lengths, with a hole about 1-1/2” from one end through which we tied a sling. The hole was deliberately not centred, to give a camming effect. Anyway, they worked, and I suspect that was the first use anywhere of tube chocks.” In 1974 Chouinard came out with tube chocks, the first commercial wide-crack protection, and later spring-loaded Big Bros appeared.

My lead went horizontally out to the edge of the chimney, then up over an awkward (5.7) chockstone onto the first decent ledge on the climb. The others soon joined me, glad to be out of the confines of the vertiginous chimney. It was in the bag now; we romped up the fifth and last lead, a 5.4 jam crack, to the top of the pinnacle.

There was enough comfortable room on top for all three of us - a bit of a surprise. We rested awhile, counting the inevitable tourists who stopped for a look, and waving to friends on the road. Then the descent; we untangled the ropes and made several long rappels down the chimney to the forests below. We coiled the ropes, sorted hardware, and walked slowly to the car, well pleased with our first ascent.

Brian continued from the chockstones, perhaps another 15 m, with an awkward bit getting around a blockage onto loose stuff above. He belayed just below the proper top – a loose flake

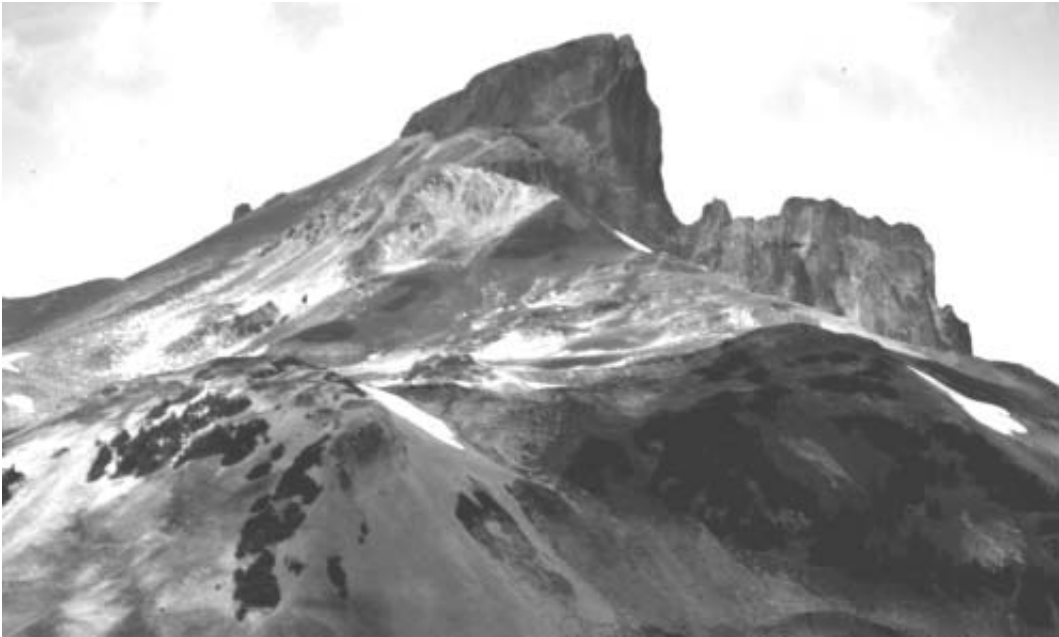
barred progress up the last 5 m. I then had a desperate struggle to follow him up the chimney, pulling on whatever was available to get on the first chockstone. Despite my gasping, I was careful to avoid abusing the little cedar, but had a long rest before continuing to the top. Two long rappels led to cooling refreshments. Getting up had been a real challenge. Despite forty years’ worth of improvements to technique and equipment, the climb was probably no easier for us than on the first ascent. Both teams had a good struggle, and used some aid, though at different places.

Black Tusk, N Subpeak – a 1938 Ascent by Brian Creer

On the North side of the Black Tusk there is a protrusion which in 1938 I believed, was called the Pinnacle, but according to Bruce Fairley may be called “The Bishops Mitre”. After discussing this with him some time ago he confirmed that all the information he has indicates that this has never been climbed.

Around 1938 I and four other rather inexperienced climbers went to the Black Tusk area with the intention of circumnavigating Garibaldi Lake and climbing as many of the surrounding peaks as we could. Even though it was August the weather was variable and as we were to learn, every time we attempted a climb, snow started to fall just after we started or as we reached a peak. Naturally the Black Tusk was our first objective and we enjoyed the climb. Just as we reached the Peak it started to snow. I wanted to climb the Pinnacle and was not going to let the weather interfere. My friends were not so foolhardy as to attempt this so they turned back to return to the Black Tusk meadows.

The volcanic origin of the Black Tusk is easily recognized because of the repeated nearly vertical slabs. In this case on the north side an enormous slab had been partly detached from the main upthrust. It rose about 15 m from the main peak, it was at least 15 m in diameter at the base tapering to 6 m at the top. On the North side the Main Tusk fell away, I estimated, at about 80 degrees for something over 300 m.



The Black Tusk from the southeast in September, 2003, north side to right. Photo - M. Feller.

I climbed down to the base of the Pinnacle and then climbed up towards the top. At that point erosion had resulted in the top of the Pinnacle being covered with a slanting pile of loose rock. I scrambled up to the top and as I arrived, the snowfall increased. After a brief pause I started to move down toward the edge of the solid rock but I was unable to move in control because of the slant of the now slippery surface. After two or three uncontrolled slides with desperation stops after only a few metres from the top, I realized that my chances of going to the edge and stopping there in order to reach over the edge to a foothold on the vertical side of the Pinnacle, were extremely low, I resigned myself to the possibility of a fall to my death and then made a careful sliding descent on my stomach towards the edge and "Guess What? "

I would not be composing this story 66 years later if I had not been successful in stopping and gaining a foothold on the vertical side of the Pinnacle a metre down past the junction of the slanting loose rock slope of the peak and the vertical side. I am wondering if I made the first and only climb of the Pinnacle.

The overall objective of our 1 week climbing holiday was to circumnavigate Garibaldi Lake while climbing each of the surrounding Peaks as we came to them. After the episode on the Black Tusk we continued in an Easterly direction.

At the east end of Garibaldi Lake was a peak we knew as Sentinel Peak but seems to be Guard Peak in Bruce's book. Anyway it is bordered on the north side by a deep valley and consists of an extremely steep north face. The south side was bordered by a glacier and was not nearly as steep as the north face, so we decided to take the easy route and arrived at the peak somewhat bored.

Our relative ignorance of climbing led us into deciding to climb down the north face which was an average 60 degree slope for about 300 m, commencing with a vertical section down a wide crack. About 30 m down there was a boulder about 3 m in diameter, jammed in the crack. We decided to rappel down to the flat top of the boulder which we did with no problem.

Once the five of us were there, I remained on the boulder while my friends continued to rappel to a ledge about 10 m below. Once they

were down that far, I was to pull the rappel rope down from the original hold and reset it on the boulder in order to continue the descent.

Fortunately two of my friends had moved out to the side about 6 m while the other two moved out to the opposite side. I was standing at the edge of the boulder talking to those below when the boulder I was standing on came loose and rolled down between the boys below. I of course, started to fall along with it.

However, as I was falling I reached over behind me and got one hand on the rappel ropes and then swung around to get my other hand also on the ropes. I continued to fall sliding down the ropes and lost most of the skin on my hands before slowing down and eventually landing on the shelf where my friends were cowering after their close call.

Fortunately, this experience smartened us up and we climbed back up to the top and went down the side we had originally come up and continued in the usual snowfall.

Our next objective was the peak known as Table Mountain or the Teacup because of the hole through its western end, which makes it look like an inverted teacup. This peak is an extremely difficult climb which we were considering rather nervously when the snow started to fall again. We realized that an attempt to climb would be extremely hazardous.

The remainder of our trip around the lake was relatively uneventful except that we ran out of food. However, we found there were fish in a pool which drained into Garibaldi Lake and caught some.

Anders Ourom comments –

I believe Brian's account refers to the north sub-peak of the Tusk itself. According to Culbert's "A Climber's Guide to the Coastal Ranges of British Columbia", it was first climbed in 1920 by Tom Fyles, Neil Carter, and Bill Wheatley. The guide says "The outer peak of the Tusk, located about 100 ft N of the main summit, is slightly higher and is isolated by a gap about 30 ft. deep. It is possible to jump to a gendarme straddling this gap, but a saner method is to rappel down and bypass gendarme to W. Leave fixed rope from main summit. Outer peak is a low class 4

and it is more difficult still to regain main summit. A ledge has been reported leading to gap along W face."

The Fairley guide mentions an ascent by Tom Fyles in 1917. I don't know where the name Bishop's Mitre arose. It shows in the picture on page 54 in the Fairley guide - it is the right hand, lower, blocky thing. It's a quite separate summit from the Tusk and its north peak. I've never heard of any attempt or ascent, though it seems very likely it's been climbed.

Wedgemount Lake, Summer Climbing Camp

2 – 10 August, 2003

by Todd Ponzini

"I think we're almost at the lake" – Tom Marvin, on the approach to Wedgemount Lake.

It's been a long time since the club has had an extended climbing camp in Garibaldi Park, and the combination of easy access, good camping, and a close knit group of peaks made the Wedgemount Lake area attractive.

Saturday saw everyone hoisting heavy packs and easing their way up the steep trail to the lake. As one hikes up the trail, it seems like the lake is not that far away, but as usual, it is much further than it seems! Hiking times to the lake varied from three to five hours, partly because four in our group (Jane, Ian, Dan, and Marilyn) were only planning to join us for three days. Camp was established in the vicinity of the BCMC cabin.

For Sunday it was decided that the team would attack Mt. Weart from two angles; Steve, Alex, and Dan would try the steep and snowy North Face, and Paul, Tim, Derrick, and Marilyn would climb the SW Ridge, which, according to Fairley, is "class 2/3". Everyone set out at an early hour, and progress was good to the Armchair Glacier, where the teams split. The SW ridge team found the notch that they were supposed to start climbing from. However, steep climbing on precariously stacked blocks loomed above. Where was the class 2/3 route? Could Fairley be wrong? As the ridge above was more difficult than the team wanted to get into, they chose to descend to the south, down a gully on the other



Steep snow on the Berna Glacier. Photo - S. Tate.



On the N Arete of Wedge Mtn. Photo - S, Tate.



Steve and Alex on top of Mt. Weart. Photo - S. Tate collection.

side of the mountain, which they nicknamed “gunsmoke alley” for the gunpowder smell of the tons of rock that crashed down it with nearly every step – suffice to say the rock was a bit loose. It was steep too, and three double rope rappels were needed to bring the team to the glacier. Paul decided that he had already had enough talus



Summit of Wedge Mtn. from the west. Photo - S. Tate.

travel for one camp and looked forward to getting back on the ice.

Meanwhile, over on the North Face, the team found some tricky climbing was needed to get across the bergschrund, and then a long climb up the face on snow that alternated between soft snow and soft snow over ice. However, conditions were good in general and they reached the

summit without incident. Instead of traveling on the tedious ridges of Weart to get to the easy way down, they descended directly down the steep west face, where one rappel put them onto the Armchair Glacier. From there, it was an endless talus field back to camp.

After the teams had arrived back from their climbs, a talkative group dinner ensued. We discovered that most of the mosquitos could be avoided by sitting in the hut – they didn't want to come through the door. Paul was named Most Vicious Mosquito Killer for the open-palmed massacres that he regularly delivered.



On the way to James Turner. Photos - S. Tate.

The group was interested in a "light" day for Monday, as both groups had spent a long day out on Weart on Sunday. As a result, a leisurely start was planned and Tom, Derrick, Paul, and Tim spent the day on a pleasant trip up Parkhurst. The weather was crystal clear, and they eyed the North Arete on Wedge, which they were all keen to go and knock off the next day. Five hours after leaving camp, they returned to do some relaxing, eating, swimming, etc.

Opting for a bit more challenge but still a shortish day, Todd, Alex, and Steve decided to climb the long couloir that drops from the summit of Rethel down the North Face to the outlet of the

lake. This couloir can be seen from the trail just below the lake, but at the cabin its hidden from view by a buttress.

The first excitement came at the crossing of the lake outlet, where Steve got some wet boots hopping across the rocks (which were very submerged). A short toil up some scree brought the group to the snow, which was hard enough to require crampons. Halfway up, the hard snow changed to a mix of ice and very hard snow, and so the rope came out. Alex and Todd swapped leads for four pitches, with Steve in the middle using an ascender to ascend a full 60m at a time.

The group found themselves in the upper ice of the couloir with a cornice standing over them, and the last lead went up some good ice to a few mixed moves and an exciting pull over the cornice. A short hike led to the summit and lunch, and then a descent back to the cabin via the Rethel – Parkhurst col.

At dinner, the plans for Tuesday were discussed. Neither Tom, Steve, nor Tim had climbed the North Arete of Wedge before, which is a



classic snow and ice line. They planned to climb it, while Todd and Alex decided on the Owls Couloir, a steep ice line on the north face of The Owls. As had been done each evening, the communal gear was sorted. Due to the difficulty of their proposed line, Todd and Alex convinced



Wedge Mtn. from Mt. Weart. Photo - S. Tate.

the others that they needed most of the climbing gear, and they ended up taking all of the ice tools, almost all of the screws, and all of the rock gear. The North Arete team ended up with no ice tools or pickets, and only one screw, “just in case”, while Derrick and Paul had a smattering of ice gear.

Derrick and Paul had climbed the Arete on a club trip a few weeks before, so decided to practise their skills on steep snow and ice. They played in the icefall and climbed on the lower arete, earning the nickname “team cordellette” due to their growing expertise at having to set backoff anchors after their Weart and Wedge climbs.

Tom, Steve, and Tim climbed the North Arete of Wedge, finding some exciting exposed ice leading up to the crest of the arete. Steve lead up the ice, using a single mountaineering axe and their only screw for protection – Steve reflected that his experience on the ice on Rethel the previous day had helped his skill and confidence on alpine ice, but some more screws would have been welcome! They reached the summit in perfect weather, admired the commanding view,

and then descended via the West Ridge, a steep route that consists of big, unstable, and creaky scree. Although this route gives an interesting circumnavigation of the peak, very few people who have picked their way down the West Ridge are keen to do it again.

Meanwhile, Todd and Alex plodded to the Weart – Cook col and after scrambling up the headwall to the col were greeted by a nice sunrise and a meltwater pool, which would come in handy on the descent. They roped up and walked down the glacier under the North Face of Weart, and descended further to the Owls Couloir. Plans were dashed, however, when they found the bergschrund to be uncrossable, save for a shaky snowcone leading to a fifth class ramp. Although the ramp lead to the couloir, it was polished and would require pins for protection, which they didn't have. As a result, the line between the Owls Couloir and the North Face of Weart was chosen. This is a steepening snow and ice slope leading to a narrowing, above which an attractive snow arete leads to the summit of Weart. Todd and Alex climbed three pitches, and were then faced with a thin snowbridge (50cm thick!) onto a

platform that dead-ended at a crevasse. No problem for Alex, as he leapt across the crevasse and continued up a steep, rotten finger of snow with big exposure and no gear in. From his belay, Todd lead up to the rocky narrowing. However, it had a waterfall running down it and wasn't climbable. Todd had to use an ice tool to excavate the dirt from the only available crack, and he bashed in a single hex for a belay. Alex came up and watched Todd try a mix of dry (and wet) tooling attempts to overcome the waterfall, but all failed due to a complete lack of protection. It was obvious why the first ascent was in November, when the waterfall would be frozen. Fortunately, an exposed ledge cut across the face to the right, where two rappels brought the pair back to the glacier under Weart. A long trudge back finished the day.

Plans were laid on Tuesday night for a climb of Lesser Wedge the next day. The plan was to go up its attractive North Ridge, or possibly up a northern couloir (that later was found to not contain any snow). By this time, the group had learned to take Fairley's comments with a grain of salt, and the vague description of "class 4 under spring conditions" added a sense of adventure to the climb. However, we awoke to rain in the morning, and as a result everyone had a good sleep-in. During the day, the weather was cool and cloudy with a low ceiling and periodic whiteouts. Although some mention was made of going bouldering or going up the glacier to practise ice skills, the only activities were eating, reading, talking, and greeting several curious day hikers.

Around dinner time, the weather began to slowly clear, and after dinner Todd and Derrick made the 15 minute hike up to "cell phone hill", as there was no reception at the lake. One advantage of this camp was cell service, so the weather was never in (too much) doubt. They learned that the weather forecast was good for Thursday but then iffy for the weekend. As if on cue, the weather completely cleared as they walked back to the lake. Based on only one more good weather day and also due to the rest day, the group decided to try and climb the remote and rugged Mt. James Turner on Thursday.

We were off at 5am, everyone's morning routines becoming polished after several days of climbing. We hiked to the bottom of the glacier,

geared up, and made it all the way to the top with no stops due to a good pace and the previous good rest. At the top, we were greeted with sun and some views of James Turner, which looked a LONG way away! Over the next several hours, we crossed the Weart Glacier, trekked across the head of the Needles and Chaos Glaciers, and arrived at a small col between the Chaos and Berna glaciers. Here there was a small meltwater pool, which was very fortunate, as we were about five hours into a long and thirsty day. From this col, we contoured the southern slopes of Fingerpost Ridge and climbed steep snow to the Turner Glacier. This was quickly crossed and we finally arrived at the base of James Turner's final rocky summit tower.

However, ascent from this angle looked very unappealing, as there were large deathly looking blocks perched at very precarious angles! We stashed our glacier gear but packed up a rope and set off to find a way up. As we turned from the SW to the SE side of the mountain, the rock improved immensely and we started up. This wasn't to say it was flawless granite, but we had close to 300 vertical metres of very enjoyable class 3 scrambling. At one point we encountered a smooth step, and we set up a quick belay. However, no further difficulties were encountered and at 3pm, roughly 10 hours after leaving the lake, we stood on the top. Photos were snapped and snacks were eaten, and we admired the view down the rugged north face. We read the summit register, which only had three entries – 1980, 1988, and 1992. Although the peak has been climbed more than three times since 1980, we were still proud of our accomplishment and documented the climb in the register before replacing it in a nice new plastic container complete with a new pencil.

Time to go home! We downclimbed the rock, crossed the Turner Glacier, and downclimbed the Berna Glacier headwall to traverse back to the spot of our meltwater pond. Good water was welcomed after a long day in the sun, and we had a nice break before starting the long trek back. As we started to cross the Weart Glacier, Paul popped through the snow into a crevasse! His pack stopped him from falling past his hips, and Steve and Todd backed up on the rope and easily

tugged him out. By the time we regained the top of the Wedgemount Glacier, the sun was down and the moon was up. Headlamps were used to negotiate the lower glacier, and camp was reached just before 11pm.

Needless to say, we slept in on Friday morning. Once we had woken up, we had a group chat and decided that since the forecast for the weekend didn't look good, we'd head out that day. A leisurely pack up led to a leisurely hike down the trail. At last, the parking lot was reached and we all headed back to civilization (Squamish!) for celebratory fatty food and beers – a very satisfying conclusion to an excellent week.

Participants: Steve Tate, Alex Danne, Paul Hawman, Tim Lawrence, Derrick Johnstone, Tom Marvin, and Todd Ponzini. (Plus Jane Weller, Ian McGillivray, Dan Friedman and Marilyn Cox for the initial weekend).

Bendor Range Summer Camp
10 – 18 August, 2002
by David Scanlon

This year we had 17 sign up but only 10 of us could make it. Those who came ranged in age from 21 to 66. On August 10 at 7 am we were away – through Pemberton, over the ever-washboarded Hurley River road to Goldbridge. We had a break in town – the last running water and “facilities” we'd see for a week.

The Ministry of Forests had indicated logging was to occur in the Truax Creek drainage due to the mountain pine beetle. The local contractor, Bruce Reynolds, gave me the number for Pat Stone who was to be the “last man out” - doing the cleanup, putting in the water bars, etc. It came up during one of our conversations that the last bridge had been taken out. This would be problematic for our trip, but not insurmountable. Pat said he would wait until we'd gone before putting in the water bars. He also said he'd put a log over the river for us.

The drive in was fine, the new road bypassing the swamp, which gave us so many headaches in trips past. Upon coming to the Truax Creek crossing we found, not one, but five logs across the creek for us. Many thanks to Pat Stone.

On to camp past Verdi Lake to Nefer Lake below Nefer Glacier. We were at the lake by 5 pm, finding more snow than the previous year, but more bugs too.

On Sunday, Marsha, Sergaey and I went up and over Chocolate Chip and Billy Bob Mtns., just playing and periodically watching the rest of our group's progress to Williams Peak. They were going over Ginger Snap and Sidestep Mtns, past Greystone col. There is a 2400 m peak I went up this year as we'd missed it the previous year.

In past years, we were entranced by a big 2650 m peak to the east. We called it Bendor Peak. Its north side was very impressive and worthy of a big, possibly first ascent for someone with a few days to spare. Fred, Brenda, and I decided to go for it. We left camp going through Boulder Col, north of Boulder Lake, south of Bendor Lake, then south, up a small glacier to a col to the east of Scary Mtn. We rested and then headed east. The south side of this peak is ridged from one end to the other. Each one giving a route to the ridge top, but there were too many insurmountable problems to follow the ridge top proper. We went about a kilometre east, then to the summit, the easier south side. I'd been waiting a year for this – a very satisfying day.

This summit is very isolated and I'm sure has hardly ever been visited. Eleven and a half hours later we made it back to camp – tired, but elated.

Marsha and Sergaey were on Black Diamond playing around. The rest of the group were on Billybob Mtn. watching us. They'd spent hours mountaineering at its best. Lounging in the sun with friends, enjoying the view, eating – a fine day.

The next day, Tuesday, Paul, Karl, Mackenzie and I went up Black Diamond. We rested in the sun and searched and searched. We were looking for John, Alice, and Fred who were going to Mt. Bobb. We saw two mountain goats near Mt. Bobb's summit but no people. Then we finally saw them, mere specks in the distance, 4 km away. Mt. Bobb is about 4 ½ hours one way, and 2840 m high. It's a long day and everyone liked this trip for different reasons, the scenery being magnificent. This is the southern edge of the dry Chilcotin area. It has many lakes, big and small, is dry, there are whitebark pines, and waterfalls – a beautiful area.

We four came down and met Marsha and Brenda between Black Diamond and R and R Mtns. We hung out in the sun for a while, then Karl, Paul, and I went up to R and R for a rest. Back at camp we compared notes on another fun in the sun day.

Wednesday was moving day. We were hoping our next camp had fewer mosquitos. We had lunch at the old mining townsite at the road's end. There we poked around the ruins while some of our group were mining quartz crystals. Marsha found the area the previous year and we then all took home some crystals. This year we all did again. Marsha even brought her hammer and chisel this year.

Some of us had brought along some alcoholic "pop" for a evening sip or two. Brenda had put a beer in the stream to keep it cool. That evening she couldn't find it. We all looked, some even going all the way down to Truax Lake. That beer just evaporated. We all looked for that darned beer but it wasn't to be found. We did see a couple of marmots walking funny though! I wonder!!

Friday saw Sergaey go for more crystals. Karl and Fred went up and over Big Chief and Stone Wheat Thin Mtns. Paul, Mackenzie and I went up and over Big Chief and did some playing on the rock on the way. We had lunch at Goat's Hair col before boot skiing down towards camp and practising our self arrest techniques on the snowfield on our way down. Marsha and Brenda spent the day climbing, playing on Truax's south ridge. We all had fun.

Saturday was when four of us had to leave. We got up as usual, but...there always seems to be a "but" doesn't there? The northern sky was dark and getting darker and the cloud cover was low. The snow started – exactly the same as the previous year. We all looked around, then at each other. We were all out of there. The snow continued gently as we headed out.

We arrived at the cars and the sun came out for a bit. We had no regrets though. We'd all done a lot, made new friends, had fun! So, to Goldbridge for a big feed, lots of coffee, then off home.

Participants: Sergaey Shevchenko, Alice Purdey, Fred Douglas, Karl Ricker, Brenda Hemsing, Marsha Ablowitz, Paul Ng, John Halliday, Mackenzie Kitchen, and David Scanlon.

Natural History Notes– Bendor Range (Part 2)

by Karl Ricker

In the previous B.C. Mountaineer (2002) I provided a report on the natural history observations of the first BCMC summer camp in the Bendor Range, in August, 2001. That report now comprises Part I of the Bendor Range observations. A second camp, in 2002, in the same month (August) has provided additional, and more extended observations. Handbooks on the flora of B.C. (Lyons and Merilees, 1995) and of the birds of western North America (Peterson, 1990) were on hand in 2002 for campsite reference, which assisted in pinning down some identifications. Alice Purdey helped to carry out the identification of the flora, while others provided observations on mammals and birds encountered on daily trips out of both campsites.

ADDITIONAL GEOLOGICAL OBSERVATIONS

Granitic Rocks of the Bendor Pluton

The highest peak of typical granitic pluton lithology, "Bendor Mtn.", was ascended by Dave Scanlon et al. by avoiding the north face with its vertical fracture (joint) zones. Traversing below the west ridge on the south side was eased by another joint system with a south sloping dip angle to provide sloping slabs to walk on. The rocks of the Bendor Pluton are not 100% monolithic as we had thought. On Mt. "Billy Bobb" several vertical dykes of crumbly volcanic rock, about 1-2 metres in width, strike roughly northwest through the summit block. Geological maps also suggest that the granitic rock on the south ridge of Mt. Truax is part of the satellite body to the Bendor Pluton which characterizes the ridgeline of "Quartz Crystal" to "Double Bitted" Mountains. However, on Truax the granitic rocks are much darker and yield a finer, less blocky, and more brownish talus than elsewhere within the satellite body. The rock on the ridge is a much darker quartz diorite or perhaps a gabbro, rather than the more whitish rock of less calcic and ferro-magnesium minerals found elsewhere. A radiometric date on the Truax rock might reveal an age much older than that of typical Bendor pluton rocks (57 million years). The summit of Truax is also on the contact between granitic rock

and the deep brown volcanics of the Bridge River Group to the east, which might account for the change in rock colour.

Bridge River Assemblage Oceanic Rocks

In 2002 we traversed “Side Step Mountain” along its rocky skyline, instead of plowing through the lower rubble covered slopes at its base. Between volcanic ribs along the skyline there are excellent exposures of intact ribbon cherts (oceanic ooze) folded with vertical axes on tight 1-2 metre amplitudes, striking roughly north to northwest. At “Greystone Col” the limestone lens was re-examined for macro-size fossils. None were found and the limestone appears to be re-crystallized by tectonic contortions that would have destroyed any fossils that may have been present. Further downslope south from the col, a second limestone lens was discovered, covered by a veneer of rock rubble. This is not shown on the sketch map in the 2002 BCMC journal.

Periglacial Features

In the elevated zone, where the ground below top soil level is frozen year-round, i.e. alpine permafrost, the action of freeze-thaw creates a variety of land forms, collectively known as periglacial features. **Rock glaciers** as mapped in the previous visit are the obvious feature. In the Mt. Truax area the rock glacier below “Quartz Crystal Mountain”, developed by rockfall onto a talus slope, has an active front now overriding a moraine developed over the last few centuries. On the other hand the rock glacier lying on the east side of the summit block of Mt. Truax appears to be of a different type. Debris fall onto the surface of an ablating and disintegrating glacieret appears to be its origin. On the west slopes of Mt. Bobb extensive fine rubble is accumulating as “**solifluction lobes**” which move slowly downslope, caterpillar tractor style, when saturated. On the west slope of Mt. Truax, however, the rubble is somewhat coarser. Descending west to “The Maddick” from the summit, “**stone polygons**” on the flat surface near the summit area are resorted into “**stone nets**” near the break in slope, and then break up into obvious alternating fine and coarse zones of debris on the steeper slope below, known as “**stone stripes**”. Curiously, where the ridge flattens

out between the two mountains the pattern of debris is lost, and there are areas of obvious wind abraded stones, some of which are grotesque figurines. Throughout the Truax basin at base camp level there is a top soil mantle of volcanic ash, sand to pebble in grain size, which was blown out of Meager Mtn. to the southwest about 2400 years ago. Larger chunks of ash were found floating in creeks about the campsite. Elsewhere in the basin there are “**turf hummocks**” in the moister meadow areas, which are another feature developed in the periglacial environment.

Mineral Prospecting

Hexagonal quartz crystals were obtained from the upper south-facing slope of “Quartz Crystal Mountain”. While all crystals were pulled out of rock rubble zones, the source appears to be a zone at 2610 to 2620 metres in elevation or about 150 metres below the summit. The largest crystals found were up to 10-12 cm in diameter, usually in broken clusters, weighing several kilos. No metallic minerals were found with the quartz.

ADDITIONAL BOTANICAL OBSERVATIONS

Trees

Not recognized in our previous trip is the obvious presence of western white pine at the mine hoist engine shed site. Observations on the upper limit of existence of some conifers is as follows:

Pinus albicaulis (white bark pine) – 2455 m on Mt. Truax, and same elevation on “Stone Wheat Thin” Mtn.

Abies lasiocarpa (subalpine fir) – 2350 m on “Black Diamond Pk.”

Shrubs

Juniperus communis (juniper) – also seen at near equivalent elevations as above, possibly a little higher on “Black Diamond Pk.”

Salix reticulata (dwarf netted willow) – about base camps

Salix arctica (dwarf arctic willow) – on slopes around and above base camps

Herbs

The identifications focused only on shrubs and herbs in the intermediate areas of the alpine base camps, during leisure hours. Some on-

the-run identifications were made while moving from one base camp to the next. In the list of identifications which follow only plants **not** positively identified from the previous summer camp are listed. Suffice to say, some seen in 2001 were not re-identified in 2002, the focus being directed to those that were not readily identifiable either to generic or species level at first glance, and thus use of the identification guide being required. Some species, however, were not in the guidebook (which is a selective rather than an exhaustive treatise on B.C.'s flora). Where "cf" is employed, means that our specimens are comparable in anatomy to the suggested species, but are likely another species unknown to us. The herb *Crepis nana*, which ekes out an existence in loose fine rubbly scree, however, is not shown nor is there a comparable one in the guide; we had to resort to another more scientific treatise to "confirm" the identity (it could be another cf!).

Flowers (white)

Antennaria dimorpha (low pussytoes), *Antennaria alpina* (white pussytoes), *Saxifraga bronchialis* (spotted saxifrage), *Anemone occidentalis* (western anemone or pasque flower – dustmop seedhead), *Tofieldia glutinosa* (sticky asphodel), *Stellaria longipes* (long-stalked starwort), *Arenaria capillaris* (three-leafed sandwort).

Flowers (Green)

Artemisia norvegica (mountain sagewort)

Flowers (Yellow)

Arnica alpina (alpine arnica), *Arnica latifolia* (mountain arnica), *Sedum divergens* (spreading stonecrop), *Sedum stenopetalum* (worm-leafed stonecrop), *Eriogonum ovalifolium* (cushion buckwheat), *Senecio elmeri* (elmer's butterweed), *Senecio cf streptathifolius* (black-tipped butterweed), *Erigeron aureus* (golden fleabane), *Haplopappus lyalli* (lyall's goldenweed), *Potentilla flabellifolia* (diverse-leafed potentilla), *Taraxacum ceratophorum* (horned dandelion-native plant), *Phyllodoce glanduliflora* (yellow heather – a shrub), *Crepis nana* ("alpine" hawksbeard), *Solidago spathulata* var. *nana* (alpine goldenrod).

Flowers (Purplish Red to Pink)

Erigeron peregrinus (subalpine daisy), *Castilleja cf miniata* (Indian paintbrush), *Cirsium edule* (Indian thistle), *Pedicularis ornithorhyncha* (bird's beak lousewort), *Pedicularis cf sudetica* (Sudeten lousewort).

Flowers (Blue to Purple)

Veronica wormskjoldi (alpine speedwell), *Erigeron cf poliospermus* (cushion fleabane), *Erigeron compositus* (cut-leafed daisy), *Erigeron cf speciosus* (showy fleabane – ours is an alpine dwarf form), *Myosotis apestris* (mountain forget-me-not), *Aster alpigenus* (alpine aster); *Penstemon fruticosus* (shrubby penstemon – a shrub), *Penstemon cf attenuatus* (taper-leave penstemon – very similar to the above *Veronica*).

FAUNA OBSERVATIONS

Birds

This year the Clark's nutcracker was more numerous, definitely very curious, and seen at several summits. Otherwise the area is not a bird watcher's haven, although we did much better at this year's camp. The following were spotted:

- Unidentified diving ducks – 2 on "Verdia Lake".
- Merlin – 1 at "Mt. Billy Bobb", 1 cruising "Quartz Crystal" and "Big Chief" Mtns.
- White-tailed Ptarmigan – mother and 3 young on "Mt. Billy Bobb", mother with 5 or 6 young at "Verdia Basin" base camp, 7 on "R & R" Mtn, 1 on Mt. Truax.
- Rufous Hummingbird – 1 at "Verdia Basin" base camp, 1 on "Mt. Billy Bobb" (same bird?).
- Steller's Jay – several, Truax Creek in forest zone.
- Clark's Nutcracker – "Chocolate Chip Mtn.", "Verdia Basin" base camp, "Jolie Lakes", 4 at miner's camp, 4 on Mt. Truax, "Quartz Crystal Mtn.", Truax base camp.
- American Crow – 2 at "Verdia Basin" base camp.
- Raven – 1 each at base camp in "Verdia Basin", "Mt. Billy Bobb", "Quartz Crystal Mtn." Truax base camp, and at Mt. Truax.
- Tree Swallow – 1 on Mt. Truax.
- Swallow (or Swift) sp. – 1 on "Mt. Billy Bobb".

- American Pipit – 1 on Mt. Williams, 1 on “Black Diamond Pk.”, 1 on “R & R Mtn.”, 26 at Truax Lake (a major area of activity!), and few on the meadows above the lake near base camp.
- Mountain Chickadee – few, en route from Truax Camp to the mine camp.
- Chickadee sp. – a flock, possibly Mountain Chickadees at “Jolie Lakes”
- Redbreasted Nuthatch – 1 at outlet of “Verdia Lake”
- American Dipper – 1 at outlet of “Verdia Lake”
- Grey-crowned Rosy Finch – a flock of 20 on “Mt. Billy Bobb”, one at “Black Diamond” – “R & R” col.
- Pine Siskins – 100 at the “Big Chief” – “Stone Wheat Thin” Mtn. col.
- Unidentified Passerine – 1 at Truax base camp.

Mammals

Noteworthy this year were the subtle shifts in foraging areas used by the goat population. A well-worn goat trail was found leading to “Hairy Col” from off the slopes of “Stone Wheat Thin Mtn.”, but its goat population had vacated the area just before our arrival. Again there was an abundance of Whistling (Hoary) marmots.

- Mountain Goats – “Black Diamond Peak” – 1, Bendor Mtn.” above “Jolie” Lake – 4, Mt. Bobb south ridge crest – 2. Goats were not seen in the Truax basin.
- Hoary Marmot – “Verdia” Basin (many), Truax basin (many), slopes at mine site (few).
- Northwest Chipmunk – 1 on summit of Mt. Truax.
- Deer – tracks in “Verdia Basin” only, no fresh tracks elsewhere.
- Pack Rat(?) – bushy tailed rodents on “Black Diamond Pk.” and on “R & R Mtn.”

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- Peterson, R.T. 1990. A Field guide to Western Birds. Houghton Mifflin Company, Boston. 3rd ed.

Lord Glacier to Railroad Pass Ski Traverse

29 April to 12 May, 2002

by Guy Trotter

April 29 – As with all adventures that originate in Vancouver, the first event was the meeting of all at the church at Taylor Way. The usual “did you remember...” questions, then we were off.

A few (but not enough) coffee stops later, we were at the airport in Pemberton, where packs exploded, food containers (those big, metal paint cans) were pulled out, and gear was organized, trimmed, consolidated and packaged into a large pack each, and a container of food. A medley of ski gear was all that remained.

Albert, Brian and I left Mike, Dave and Janine at the airport to make the flight directly to the Lord Glacier via the food cache (on the east col of Icemaker mountain). Albert, Brian and I ferried the cars as high up the Hurley River road as we could - we were fortunate enough to find an appropriate landing area for the helicopter just as the snow started to appear on the road - at about 900m.

Just as we had unloaded the gear and changed, John appeared in the helicopter and whisked us to our camp on the upper reaches of the Stanley Smith Glacier (tucked in on the south side of Mount Henderson) - a spectacular flight in the bright blue skies that we were to experience for the next 4 days.

Regrouping on the Lord Glacier, we contemplated the silence after John flew off, then prepared tent platforms, erected tents, dug a kitchen and latrine, establishing our camp for the next 3 nights. The day was young, so we gathered gear and set off for the summit of Mount Henderson - easily skiing up the NE ridge to the summit. The expanses of the Lillooet Icefield spread out in front of us and the peaks and icefields beyond filled the horizons. A ski on breakable crust quickly returned us to camp. Late that afternoon, we saw 4 skiers pace across the head of the Stanley Smith Glacier and turn off south to Stanley Peak. They were to be the last people we would see for the next two weeks.

April 30 – Our first morning established our “waking order” for the next two weeks – Brian was usually the first up (responding to a curiously regular call of nature) and put the stoves on for



Janine in a wind cirque with the Henderson camp behind on the glacier. Photo - G. Trotter.

the morning tea/coffee/gruel/corn soup for the rest of the group. Dave and Janine were usually up next, and Mike and I arose once we were certain that the sun had indeed touched the tent.

That day, we set off for Mt. Wheatley - about 6 km from camp on the NE fringe of the Lillooet Icefield. The night's cold had frozen the snows as we descended from our camp and zipped along the glaciers east of Mts. Henderson and Dodds. When our altitude gain ran out, we skated across the glacier, and skinned up below the col west of Mt. Wheatley. Up to the col, then a magnificent ski down the north side of the col on light-ish snow over a firm base. We skinned up again, and gained the NE ridge of Mt. Wheatley, which we followed on skis as far as possible. A final 100 or so metres along a narrow and moderately airy ridge led to the summit - and clear views as far as Mt. Waddington.

Another fantastic ski down and a hot, sweltering climb back up to the col as we experienced the microwave conditions that the sunny skies had brought to the glaciers. Touring back to camp, we climbed west from the col up



Camp below Mt. Henderson. Photo - G. Trotter.

and onto the Lord Glacier proper and back to camp.

May 1 – Another sunny day found us contouring around the south side of Mt. Mills, destined for the N/NE face and N ridge. A grind up hardening snow took us to the terminus of the N ridge. A short, horizontal meander across rock, and then 50 m of steeper climbing on hard snow brought us to the third summit of our trip - but the winds were blowing. A careful descent back down the face in the wind compelled us to seek out shelter amongst the rocks above what might be a small lake tucked into the NW basin of Mt. Mills, but it made for a sparse shelter. The winds did, however,



On the N Ridge of Mt. Wheatley. Photo - B. Wood.

subside as we descended the mountain - discovering a sheltered pocket of lighter snow and better skiing.

Crossing the upper reaches of the Lord Glacier, we made for Mt. Dodds, ascending via the broad NW ridge/N face on skis. (I was grateful, however, for the ski crampons that assured my continued connection to the steeper, icy snow). Above the N face, we traded skis for ice axes (unnecessarily), and scrambled up the rocks of the W ridge to the summit. Dropping back down the N face, the winds picked up again, but eased as we skied back down to the Lord Glacier and a quick return to camp.

May 2 – We broke camp, split the group gear, and stuffed our gear into our packs - some light, some heavy (Albert winning the lightest pack prize, me winning the heaviest pack prize). The conditions were perfect for our descent across the neve and down onto the Bridge Glacier - the snow was hardened, and we zipped along, covering about 12 km in perhaps an hour and a half (the previous year, in whiteout and heavy snow, it took us about 4 hours to cover the same distance). At about 590275, we put on skins and climbed up and onto the icefield west of White Cross Mtn.

The winds were blowing - not heavily, but nonetheless continuously - as we searched for a wind-protected campsite. We descended to tree line due north of White Cross Mtn. and found a small knoll out of the wind - with spectacular views across Bridge Glacier to the Lord Glacier group and down to the Bridge River.



Camp below White Cross Mtn. Photo - G. Trotter.

May 3 – An attempt of White Cross was in order - though the winds were still blowing, and clouds had started to roll in across the icefields.

We quickly ascended from camp on hard snow and crossed to the west face of White Cross. Not happy with the mixed rock and hard snow, we walked around to the SE face to check it out. A long gully appeared to offer a way to the summit, although the head of the gully seemed to have a problematic portion of steep snow leading into a steeper gully before the ridge. I declined to attempt the ascent, and, along with Janine, hiked up the (almost as high) snow mound to the SE, as we simultaneously watched the others attempt the gully.

Finding a crust over isothermic snow, Mike and company wisely descended from about halfway up the face. We regrouped and headed back to camp.

That evening, periodic snow squalls came through camp - nicely timed with the preparation of dinner. However, they disappeared as quickly as they arrived, and we spent the evening watching clouds appear, then disappear, over the icefield.

May 4 – Continuing the traverse, we descended slopes NNE of White Cross down into the reaches of North Salal creek. The snow was very hard, and frequent traverses across steep slopes were necessary to find a route down into the valley.

Looking east up and onto the “Ochre Mountain Plateau”, we became uneasy about the weather and the possibilities of being forced to navigate through whiteout on the upper icefield west of Ochre Mountain - clouds were starting to swirl around the peaks - a weather change was definitely under way. Instead, we elected to follow Salal Creek south, then follow it's NE branch up towards Athelney Pass - a spectacular ski under the peaks S of Salal Creek, beside huge wet snow avalanche runouts, and up, over, along and down a moraine midway through the valley. Reaching Athelney Pass, we sought refuge from the wind behind the first stand of trees on the S end of the pass - discovering 3 ready-made tent platforms carved out naturally by the wind.



Mt. Ethelweard from near Athelney Pass.

Photo - B. Wood.

May 5 – Watching the clouds form and roll through the area of the pass, along with frequent glances at the air pressure, became the order of the day, as did speculation on our possible alternatives if the weather didn't clear in the next few days - it was Saturday, we had planned to reach our food cache east of Icemaker Mtn. on Sunday, and, barring that, only had food for at most another day or so. Although we could have made an ascent of Ochre Mtn., the group was in need of a rest day - a short ski to check out the dilapidated miner's cabin at the pass was about the most energy we could muster - although Mike did a reconnaissance of the approach to the glacier N of Icemaker Mtn. (our proposed route), and finished off with a good ski on fresh snow on the west slopes above our camp.

May 6 – The weather was changing - clouds would alternately cloud in then clear our route up

the N Icemaker glacier. We decided to make a move, broke camp, and made our way across the lower reaches of the glacier. Brian broke an increasingly steep trail up the glacier west of the icefall in the sun -sweltering, hot work. As the glacier levelled off, Dave and I broke trail east across the upper glacier, then south towards the col at approximately 773233. At the col, the weather changed and cloud and snow swept in.

We descended partways down onto the glacier east of Icemaker, then huddled as we waited for a clearing in order to see our way down onto the lower icefield. Just as we were preparing for a difficult navigation exercise in a descending whiteout, the weather cleared, and we made our way to a campsite on the upper icefield. We quickly established camp, then went out to retrieve the undisturbed food cache at the col.

Back at camp, it was like Christmas as we all found the goodies that we had stowed away - Dave and Janine got a Pringle fix, Mike had a big bag of Kettle Valley chips, and I had a package of fig newtons, caramels, fruit gummies and a half litre of single-malt scotch (!). We disappeared into our tents to nibble on our respective treats!



Camp below Icemaker Mtn. Photo - G. Trotter.

May 7 – The previous day, I had discovered that one of the edges on my skis had started coming out at the tail. Thus, I spent two hours that morning warming my ski over one of our stoves, then

epoxying the edge back into the ski under Brian's guidance. After re-waxing our skis (the wax having been effectively rubbed off by skiing on the hard snow of the previous 8 or so days), we made an attempt on the S ridge of Icemaker. Brian, Mike, Albert, Dave and I reascended to the col S of Icemaker, then skied up to below a small outcropping of rock, where we traded skis for ice axes. We climbed up along the ridge, with the weather closing in, and the views downwards disappearing. Brian led up a steeper slope of snow. When I followed, I discovered a distinct crack at the top of the slope - a fracture line that hadn't (fortunately) released. This, combined with the now whiteout conditions on the upper mountain forced our retreat back to camp.

Retrieving my skis, I discovered that the edge on my other ski had started to also come out (!). Back at camp, I spent a cold hour fixing this edge.

May 8 – With clear skies marking the end of the variable weather we'd experienced for the last 4 or 5 days, we made a second attempt on Icemaker via the S ridge. Not liking the hardened snow now throughout the upper mountain, I stopped early, allowing the others to continue. Janine also came down shortly thereafter, and we watched the others make their way up onto the upper plateau and spied them as they successfully climbed up to the summit. Upon their return, we skied back down to camp. Deciding to push on, we broke camp - building massive packs with 6 or 7 days worth of food, and food containers haphazardly strapped on to the back. With an empty fuel can and garbage, my pack felt exceedingly heavy. We skied slightly down, skinned up, and then began a long, gruelling climb up to the col at approximately 798203.

After a long, painful climb we finally reached the col and looked down into the headwaters of Pebble and McParlon creeks. The snow conditions were quite atrocious on the east side of the col, forcing us to zig and zag our way down across breakable crust. As our route steepened and narrowed, we resorted to walking down and dragging our skis until we had slopes that gave us "zig zag room". With the unpleasant conditions, coupled with the discovery of a spectacular campsite at treeline, we elected to set up camp early, leaving the descent to the valley bottom until

the next day, when the snow would have hardened up. The evening brought spectacular alpenglow views of Mt. Thiassi and the other peaks surrounding the McParlon and Pebble Glaciers.



Heading away from Icemaker Mtn. Photo - G. Trotter.

May 9 – Upon the expected and hoped-for hardened snow, we skied, then hiked, down the steepening slopes into the upper Pebble creek - searching (with GPS) for the Pebble Creek cabin, where we hoped to leave our food canisters (for retrieval in the summer), and burn our garbage. Thanks to the GPS, we made a beeline for the cabin, and spent a leisurely few hours burning our pile of garbage and warming our toes and boots by the wood burning stove. From the hut, we made our way over to the toe of the Pebble Glacier, and climbed up into the upper reaches, eventually establishing camp at about 2000 m.



Dave and Janine on the Pebble Glacier. Photo - B. Wood.

May 10 – Unfortunately, I awoke midway through the night with a queasy feeling – quickly relieved by vomiting outside the tent, but making me feel somewhat less strong for the day's proposed ski and climb across to the environs of Mt. Thiassi. Although I felt much better in the morning, and started off with the group east and north up to the

small peaks overlooking the upper McParlon glacier, I quickly tired and elected to return to camp - my day was thus spent drinking, eating, reading, and awaiting the return of the group.

Towards 6 pm, the group reappeared high on the ridge above camp, and made their way down what was "surfy" wet snow down a cunning line of moderate slopes back to camp. They had ascended peak 2600 m, east of the McParlon glacier, having marvellous views of Mt. Thiassi and environs.



Albert with Mt. Thiassi ridge behind. Photo - B. Wood.

May 11 – We broke camp and (with me feeling as good as new) skied to the col at about 845135 overlooking the upper reaches of North Creek. Ditching skins, we descended in absolutely perfect conditions (a wee bit of soft snow on a solid base) into the valley, rounded the corner to the SE and gained the toe of the Boomerang glacier. With the tower NW of Delilah dominating the view to the S, and with Samson commanding the apex of the Boomerang glacier to the SE, we skied up the glacier, following the tracks of a large cat-like creature that had passed sometime before us.

When the Boomerang glacier fell away to the NE, we skied into the col at 875086 beneath the massive W and SW slopes of Mount Samson. We paused for lunch, and pondered our route up what was looking like a sun-warmed slope up at 895068. We skied down and across to the slope, with Albert putting in a huge effort to break trail up the slope. We found that the slope had a soft surface but retained a hard base underneath, allowing safe access into the upper valley. Proceeding through the upper valley, we reached the col at about 898053, and the inevitable winds. Electing not to camp at such a windy spot, we traversed the col and dropped down into the head

of the valley to the SE, skiing down the valley to treeline, initially on sun crust, but soon on soft spring snow. I was surprised to see what I thought was a rock (but was actually a marmot) dive back under the snow as I skied by! We established our second-last camp at treeline, with a great view east to our final climb to the col at 936038.



On the Boomerang Glacier with the Samson col in the distance. Photo - B. Wood.



Traversing from the Boomerang Glacier to the Samson col. Photo - G. Trotter.

May 12 – Awakening to continued clear skies, we broke camp and dropped down, on hard snow, into the upper reaches of the valley. Contouring high, we skittered across three steep gullies on hard snow and began the final climb to the col. It was a hot day, with the sun rapidly warming the snows, and putting an end to our ambitions to bag a final summit - one of the two peaks guarding the upper col.

Weaving a line up the face below the col (with the sun warming the cornices threatening the route), Mike and Dave broke up to the col. A steep pitch, downclimbed by all except for Albert led to the upper reaches of the valley. Mike contoured high around the N side, across death cookies from the snow that had tumbled down from the

sun. Being the last to cross the south facing slopes, I was nervous as I zipped along the slopes, but I reached the other side uneventfully and joined the gang for lunch in the hot sun.



Below Mt. Samson. Photo - B. Wood.

Though we didn't have far to go to get out to the roads, we weren't ready to end our time in the mountains - so we contoured around the slopes to the east and set up camp, again at tree line, with views down into the Lillooet river valley. Reaching camp early allowed us to read, relax, and just enjoy our final afternoon in the mountains.



Camp below Mt. Samson looking at the last day's route. Photo - G. Trotter.

May 13 – We were up and ready particularly early this morning - no doubt driven by images of greasy pizzas, cafe lattes, caesar salads and other foods that had occupied our thoughts and conversations increasingly over the last few days. Contouring around the mountain, we aimed to descend the broad ridge passing through 965010. We skied down, first on hard snow, then on softening snow, and then into tighter trees and eventually to the point where, one-by-one, we decided that walking

through isothermic snow was a safer option than skiing.

The descent on foot went surprisingly quickly. We soon reached the upper part of a clear cut, then found a road at its base which lead us almost directly back to the vehicles we had parked 2 weeks earlier. Packs and skis in the trucks, we beetled down to Pemberton, to beers and showers at the Pemberton Hotel, then coffees, cinammon buns and sandwiches at the Pony Espresso, and the final drive back to Vancouver to the place where all adventures ultimately end – the church at Taylor Way.

May 14 – As I write this late at night, it was great to reflect back on the trip – my first big traverse through the Coast Mountains. It was a fantastic trip, with a great group of people, through absolutely spectacular terrain that truly defines the majesty and beauty that is the Coast Mountains of B.C..

Participants: Mike Thompson, Albert Souza, Brian Wood, Dave Jenkins, Janine Toole and Guy Trotter.

Central Coast Mountains

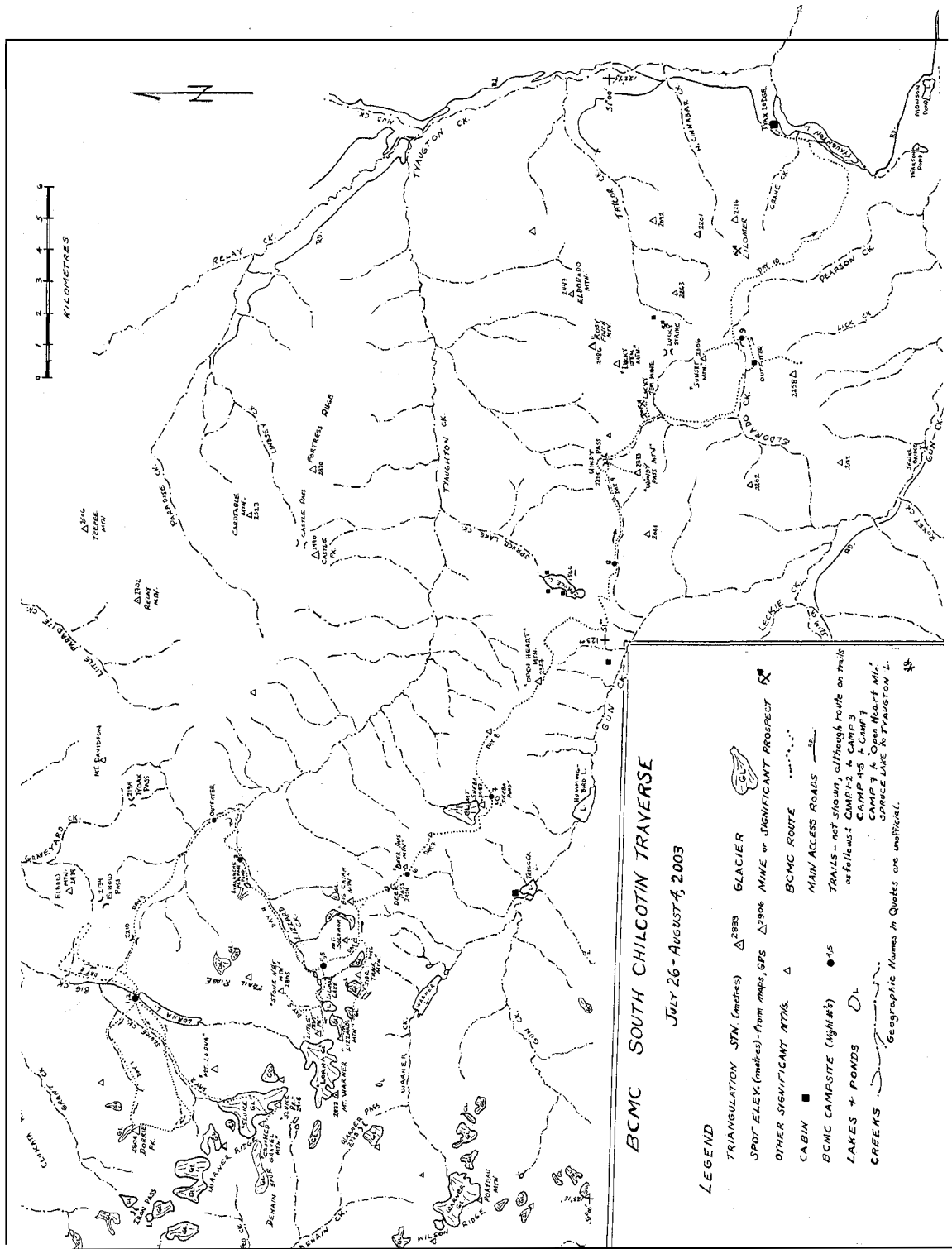
Blissful Blundering Through the South Chilcotin Mountains

25 July-4 Aug 2003

by Brian Wood

The South Chilcotin Mountains, situated about 100 km N of Whistler, are unique, not only in BC, but in the whole of Canada. The area is relatively compact, and has outstanding natural beauty, high biodiversity and unusual geological features. It was these characteristics that caused it to be first proposed as a park in the 1930's by local naturalists, and in spite of the efforts of many, it is still not protected. In the 1990's, during a publicity campaign to try to protect the area, it was given the name "Rainshadow Wilderness" as it lies in a transition zone between the wet Coastal Ranges to the west, and the dry Interior Ranges to the east. It is this transition zone which contributes to the area's high biodiversity.

This trip had more trouble than usual getting started. There were two postponements of the start date from an initial date of early June, then to



late June, and finally to late July because of persistent snow cover due to a cold spring. It is not surprising that the members of the party also went through many changes, the final stalwarts who hung in there being: Norbert Eckert, Jenny Faulkner, John Halliday(John H), Ziff House, Albert Nickull, Bob Price, Karl Ricker, John Sapac (John S), Larry Starke, and Brian Wood (organiser?). Even after the trip had started, the proposed route itself went through many changes, and at times I wondered if we would finish the trip as a single party. This vagueness of routes seems to be typical of some of my trips where nothing is definite until it is done. I find that I tend to watch, more as a bystander than a leader, as BC-style endangered democracy is subjected to the tyranny of the majority and/or alpha-males (but sometimes alpha-females) until the route gets settled. In the end, the weather and timing were just about perfect, and the route we took was very scenic and not difficult. Briefly, our route involved flying from Tyaughton Lake, 10 km N of Goldbridge, to a base camp at relatively remote Lorna Lake. We explored the Lorna Lake area, moved camp to Lizard Lake and explored there, and then followed a relatively high traverse, generally SE, before dropping down to Spruce Lake. We then took the "High Trail" over two passes, and followed Pearson Creek generally SE to connect to old roads back to Tyaughton Lake. We found the most useful map for trails and routes was the 1994 BC Forest Service Recreation Map "Spruce Lake Trails Area". Some details on this map did not agree with the standard 1:50,000 map, "Warner Pass", which does not show many trails, nor does it cover the finish of the route.



Woody's motley crew. Photo - B. Wood collection.

Day 0 – On Friday evening, all ten of us met for the first time at the campsite near the west end of Carpenter Lake. Karl worked out that the party's average age was 59 years (range 38-67), so many of us had good excuses for our forgetfulness (provided we could remember our excuses).

Day 1 – At the crack of dawn on Saturday we drove about 15 km along gravel roads to the very grand Tyax Lodge on the shore of Tyaughton Lake. Tyax Air Services operates a float-equipped Beaver from here, and Dale, our pilot, arrived late. This gave time for those who were reluctant to cast aside the bonds of civilisation to have a fancy breakfast in the lodge, while the hungry eager beavers took the first flight at about 8.15 am. After two spectacular 20 minute flights in clear skies the party was established at the base camp at Lorna Lake. We pitched tents near the N end of Lorna Lake at about 1920m, which is a little below treeline but there were many natural clearings which permitted spectacular views S towards Mt. Warner, and N down Big Creek. Those who had missed breakfast now had time for a late breakfast. By noon most of us were ready to escape the bugs and take advantage of the good weather to do a little exploring. We had been recommended to climb Dorrie Pk. which, at about 2835m, provides a good viewpoint for the area. After hasty preparations, some of us set off over a dry low wooded ridge to walk up the gentle wet drainage around Sluice Creek. Half an hour after we left camp two people who had said they were coming with us had not yet caught up with the main group, and there was enough bush to get well separated. I had a sudden premonition of future difficulties in trying to keep together this rather unconsolidated group. Eventually we were together again, but then we had to leave Sluice Creek to gain some height. Some of us tried a direct route up the bright red/orange talus slopes, which were quite common around there, but the talus was quite loose and this proved to be slow and tiring. Others preferred a hard packed snow route up a wide gully, but eventually some decided not to complete the route to the summit. Inevitably we became scattered again, but from the S ridge to Dorrie's gentle summit I could see most party members, so the scattering did not seem to be too risky. In the late afternoon sunshine, those on

the summit could look N beyond Powell Pass to one of our original possible objectives, remote Mt. Vic, one of the highest peaks around here at about 2990m. Portions of the approach route looked quite feasible, but it seemed a long way so those interested in Mt. Vic were planning a lightweight trip, which would involve leaving a cache at Lorna Lake. We could also see, in a smoky haze, the Dil-Dil Plateau, which had also been one of our original objectives but had lost out to higher, more mountainous objectives.

We started the descent by traversing a little of the gentle NE ridge, which had a steep snow-covered north side. Most of us then followed the descent route taken by those who did not make the summit, which was a broad gently sloping shallow boggy drainage which reminded Jenny and John S. of parts of Baffin Island. I assumed that everyone was in front of Jenny, John and me, and so when we noticed a lone figure on the skyline to the S we assumed it was someone from another party whom we had not noticed before. The slope of the shallow drainage rapidly increased and terminated at a steep hard snow slope located above a boulder field, where we saw our party waiting for us. With such an audience watching us it was doubly important to take care descending this slope with our unaccustomed knees on our first day. We were surprised to find that Norbert was not with the others, but as he is fast and competent we assumed he was in front. Most of us were fairly tired and hungry when we arrived back at the camp by about 6 pm, and were again surprised to find that Norbert had not yet arrived, but we assumed he was taking photographs. It was warm and buggy at camp, but the bugs did not discourage some hardy souls from taking refreshing dips in the lake. After supper at about 8 pm, there was still no Norbert, and with only an hour or so of daylight left, my imagination was racing with multitudes of unpleasant possibilities. Some of us reluctantly started collecting gear for a possible search, and then thankfully Norbert appeared and was surprised to hear of our concern for him. He had seen us looking back at him while he was on the ridge (so that lone figure was one of our party!) and assumed that we knew he was trying an

alternate route back to camp. He was bluffed out of his alternate route, and had to return using our route. Later, contemplating our first day as a group, I was amazed at how many times we had become scattered, even on a relatively short "warm-up trip". When I checked the map I reckoned we did about 14 km that day. The estimated distances for this trip account are obtained by adding a fiddle-factor of 10-20% to the map-measured distance, which is low adjustment according to some folks.

Day 2 – Sunday dawned beautifully clear, and Karl was all fired up to go real peak-bagging, and avoid any more insignificant "rock piles" like we had climbed the previous day. As it was such a superb day he had no trouble forming a coalition of the willing to accompany him, namely Jenny, John S., Norbert and me. The plan of the climbing group was to attempt an un-named 2895m summit on Warner Ridge, which was higher (surprise?) than the local "brand name" peak, Warner Pk. at about 2834m. This peak was later named by us as "Sluice Pk.". Some peaks given unofficial names by us are in quotation marks. The remainder of the party decided to follow the outflow creek from the lake, which becomes Big Creek, down to Graveyard, the scene of an old aboriginal battle. This general area is called "the gentle wilderness" because all the peaks are less rugged than the Coast Mountains and have at least one non-technical ascent route. Our climbing group took our single light rope and miscellaneous tapes and karabiners for harnesses. We followed the previous day's route further along Sluice Ck. until it connected with the largest glacier on Warner Ridge where we roped up and switchbacked on easy slopes to a col on the rocky NW ridge of Sluice Mtn. We cached some gear and scrambled to the summit where we had lunch and admired the superb views, and noted that Mt. Warner looked like a real challenge from this side. After lunch, we descended the NW ridge back to the col, then followed Warner Ridge NW to climb the next bump, named "Crushed Gravel Mountain", whereby we finally satiated Karl's peak-bagging appetite for a while. After a quick descent on soft snow, we reversed our route to arrive back at camp by 5.30 pm after covering about 16 km. The creek exploration group had already returned, but had

not made it all the way to Graveyard as the "trail" was intermittent, rough and sometimes boggy.

After dinner we had a lively discussion on the multitude of possibilities for the next week, and I almost despaired when I heard the differences in peoples' choices, and the states of blisters and knees of those still recovering from the previous day's warm-up trip. There seemed to be an overall feeling against a lighter "death march" to Mt. Vic, especially after our resident geologist, Karl, declared it to be another "rock pile" somewhat like Dorrie Peak. Everyone wanted to visit Lizard Lake, which appeared to be a "short hop" from Lorna Lake south over Trail Ridge, but most people were not prepared to risk an unknown, possibly steep and quite difficult "non-route" with overnight packs which we had not yet appreciably lightened. The compromise was to take a fairly predictable more up and down "map route" to Lizard Lake via Tyaughton and Lizard Creeks. After exploring there we would take a high traverse, mostly on routes not trails, along high ridges towards Spruce Lake. The map showed a vague disconnection between a route on the ridge and a fairly close route leading to Spruce Lake, but we were prepared to live with that unknown. So, under the heavy hand of BC-style "democracy" our immediate future had been settled without a fracas, even though the final outcome bore little resemblance to my original planned route. Ah well, who expects BC elected officials, in this case the "organiser", to carry out election promises - in this case the original planned route! Some people started to lighten their loads by eating or giving away heavy luxury food or reluctantly burning it, because we had planned to leave the next day. That night I slept more soundly knowing that the threat of mutiny had been averted, at least for the moment.

Day 3 - On Monday, after just a few complaints, we left camp with full loads at 8.30 am, a remarkable achievement which we actually managed to improve upon many times on our traverse. This supports the theory that the older you get, the less sleep you need. Or perhaps it has something to do with older men's plumbing. Or perhaps older people's hearing is less sensitive and we are not awakened by normal night sounds of zippers opening and closing. Or perhaps we are just

getting smarter and want to get the main climb done early in the cool of the morning. Anyway, after lots of snacks to lighten our loads, before 11 am we crossed a well-graded and unofficially-named "Lorna Pass" just S of Elbow Pass, and stopped for lunch in warm sunshine on the other side where we had good views of some portions of our intended route. After lunch we descended towards Upper Tyaughton Creek which we reached in the heat of the afternoon. After a short debate over vague trail signs at a trail junction, we forded a creek and were soon following Upper Tyaughton Creek gently downstream on a well-used trail leading past an outfitter's cabin and horse corrals. At the next trail junction, we took the unmistakable Lizard Creek trail, now following this creek upstream. It was here we learnt that some horse trails tend to keep low and out of the bush by crossing and re-crossing the creek, often using sandbars, whereas we know that hiking trails tend to keep out of creeks to keep feet dry. It was bushy in or out of the creek and soon the complaining murmurs about the route from those at the rear of the party reached those at the front. Luckily we found a flattish small meadow, just large enough for a campsite. It was pleasant by the creek in spite of the late afternoon bugs, and some hardy souls took complete dips in the frigid water. I think I saw a Harlequin duck and young in the creek, and they did not seem bothered by us. We had time for a leisurely dinner and chats, and some used the latest in medical technology to deal with their blisters. We had done about 12 km. with full packs and lots of elevation change - a shock to the system for most of us.

Day 4 - The next day, Tuesday, the weather was again perfect, and we were soon thrashing our way through bush which seemed worse than the previous day's. We had a brief respite from the bush when we came across a small lake located in a meadow just north of the creek, where we saw Goldeneye ducks. The respite did not last long as we soon moved into a slide alder zone which was probably rated 7 out of 10 on the "International Wyborn Bush Scale" because most of the time our feet were either on or within an easy step of the ground. Gradually, as we gained height up the creek the bush lessened, and we finally reached some small tarns in a shallow

basin, still some distance from Lizard Lake. Because it was hot and we had been working hard, and the tarns were a stunning, irresistible turquoise, it did not take long for a few of us to take quick dips in the closest tarn. While drying in the warm sun it was easy to suggest that this would be a good lunch spot. While most of us were having lunch, John S. climbed onto a bench about 30m above our lunch tarn, and found a series of small pools separated by flats in a scenic plateau which he recommended for a campsite. After post-lunch lassitude had taken hold, I could see that getting people to go further would be a challenge. Some of us explored John's scenic plateau and the flats seemed to cry out to be tent sites even though it was just after lunch. Meanwhile, Norbert and Bob had left their gear by our lunch tarn and headed up the extra 150m to Lizard Lake to see what the camping was like there. When they returned with a negative report, we wandered around the scenic plateau and claim staked our tent sites. It was still early in the afternoon so most of us slowly explored the area taking photos of the excellent views. The setting was spectacular as it ranged from the steep snow and rock of the Warner Ridge extension to the S and W, through the steep dry desolation of Trail Ridge and the greenery of the Lizard Creek valley running into the Tyaughton valley to the N, to the imposing rocky pillars of Cardtable and Castle Mountains to the E. Some had more dips in a local quite warm paddling pool, and some even washed clothes! If only our significant others could see such contentment from such simple things! After early dinner it cooled down because we were at about 2160m, but it was not really "alpine cold" and we had a bonus of no bugs.

Day 5 - Wednesday dawned perfectly clear and quite cool, and by 8 am members of the climbing group, reveling in anticipation of traveling light without heavy packs, took several different routes generally SW to meet at Lizard Lake. Meanwhile the route recce group of Albert and John H. headed generally SE to check an easy route for the following day's climb out from this basin. Karl and I headed up snow gullies to Trail Ridge, where

peak-addicted Karl desperately searched for a feasible route around some large and exposed gendarmes of rotten rock to try to get to Mt. Warner from the E. As I have been slowly kicking the "peak-bagging habit" over the years, my craving for a peak fix was less than his and he could not persuade me to "go for it". Having realised that I was a lost cause as a peak-bagger, Karl decided we should descend to a low col on Trail Ridge where we met other members of our party. From here we could clearly see a straight forward and mellow (?) route from Lorna Lake to our col, which convinced me that our previously contemplated "short hop" over Trail Ridge would have been "a go". It seemed to be more aesthetic and certainly more bush-free than our actual route had been, and it appealed to me as it was a mostly high traverse direct route from Lorna Lake to Lizard Lake. To satisfy those with peak-bagging cravings we headed NE along a broader part of Trail Ridge to a 2775m bump, called "Stone Nets Mountain", where we met Jenny and John S. who had scrambled up directly from Lizard Lake. Here, on this bouldery summit we had lunch in windless sunshine and examined feet for wear and tear discussing suitable remedies! We had been blessed with incredible weather, the only blemish being wildfire smoke haze that seemed to worsen towards the evenings. After post-lunch power naps we descended back to camp by 4 pm, where we met the successful recce group, and then had warm water dips, afternoon tea, and early dinners to avoid early cooling in the evening.

Day 6 - On Thursday, we had a cold, clear start, leaving camp at 8 am and following the route up to the col which had been checked out by Albert and John H. the day before. Some of us saw two small groups of bighorn sheep on the way to the col, and some saw them from the col. It did not take more than an hour and a half to get to the col, so we had lots of time to explore the area. There were distinct "bumps" on broad ridges to the W and the N of the col, the northerly one being named Mt. Solomon on some maps. Most of us explored the nearest bumps on both ridges because the walking was relaxed and the views were spectacular. On the western ridge there were several distinct outcroppings of reddish "chert or

jasper” which looked like a vampire’s teeth after a recent meal.

After snacks at the col, most of us were ready to move on, but Jenny, John S. and Norbert wanted to explore further along the western ridge towards Mt. Warner, and so we left them to it. The rest of the party followed a quite well defined trail heading generally SE along a gentle ridge past a few more bumps and finally we descended to Deer Pass with a high point of about 2300m. Earlier we had decided to camp just on the other side of Deer Pass, and as it was still early afternoon some of us relaxed here and others explored. Some climbed a nearby bump generally N of Deer Pass which was very noticeable because of a huge cairn on top, which we later called “Cairn Mountain”. The trail over Deer Pass is well used by horses and mountain bikers and so the soft terrain was quite disturbed and not very appealing. As the weather was so settled and the views so spectacular, most of the party decided to risk an exposed night by camping well above the pass. Here, between patches of earth and rocks, there were many patches of hard snow for our water supply and tent platforms. While we were busy levelling the snow we did not notice that the wind was gradually picking up until finally some folks thought this exposed place was not such a good idea. Bob decided the wind might damage his lightweight tent, and so he opted to camp down at the pass. Laziness, blind optimism and/or the lure of a high campsite led the rest of us to add more rocks to our tent anchors, and we just hoped for the best as we hunkered down and cooked our dinners. Late season snow in windy places is often dirty and this place was no exception, but the gritty texture imparted to our meals was still worth it. Eventually we saw Jenny and John descend the ridge to Deer Pass where they camped with Bob. We learnt later that Jenny, John and Norbert had thoroughly explored the western ridge, which is bluffy on its N side leading down to our last campsite and gently sloping down to Warner Creek on its south side. They followed this ridge for about 3 km W over a series of craggy bumps to climb a distinct 2750m summit SW of Lizard Lake and just E of Mt. Warner. This was the summit that Karl and I had tried to reach from the north the day before, and was later named “Lizard

Mtn”. After dinner most of us wandered around the col and climbed the nearby bump to the E, “Deer Pass Mtn.”, to take photos in the setting sun. Back at the tent I decided to pack my pans with snow that would melt overnight in the relatively warm wind that was showing no signs of abating. That day we had covered about 13 km with heavy packs, and there did not seem to be too much tiredness in the group, so we must have been getting fitter.

Day 7 - The next morning started out with high overcast and was still windy, but this did not keep us in the tents. I was about to warm up the melted snow in my pot when I saw (marmot?) jawbones at the bottom of my pot, barely visible in the grey water. I did not understand how I missed them as I packed the snow into the pans the previous night, but I assumed it was inattentiveness, poor eyesight in the dusk, or perhaps one of those “senior’s moments”, which seem to be getting more frequent. At 8 am, Jenny, John S. and Bob joined us from their camp at Deer Pass where they had appropriately seen a deer, and we then set off along a good high traversing trail towards Mt. Sheba (2650m.). In pre-political correctness days this peak was also known as Sheba’s Breasts, and it had dominated our views to the SE most of the day before.

At about mid-morning we stopped at a nice setting on the S side of Mt. Sheba, and Peak-Baggers Inc., a hastily formed corporation dedicated to knocking-off peaks, convened its first board of directors meeting to decide the next activity. The opportunistic CEO, Karl, advanced arguments to convince his peak-bagging-addicted colleagues that an obvious investment opportunity like this, i.e. his proposed ascent route right in front of us, should not be missed as the corporation’s share value (aka bragging rights) would decline if the corporation let it pass. The more conservative directors were looking without much enthusiasm at the proposed route which included steep, loose, totally-unappealing talus slopes intermingled with rotten bluffs. The conservatives were considering their pensions and what impact a bad decision at this stage could have on their bonuses. Like all good boards, when at an impasse, we called in an independent technical consultant, namely John S., who had



John, Jenny, Karl, and Norbert on the glacier on the N side of Warner Ridge. Photo - B. Wood.



Lizard Lake and the lunch tarn from the SE. Photo - B. Wood.



Camp site below Lizard Lake, looking towards Mt. Warner. Photo - B. Wood.

climbed this peak about 10 years before. John remembered that it was climbed on a *weekend trip* and he did not remember any difficulties, but he also admitted unfortunately he could not remember the route. This admission was seized upon by the peak addicts and the corporate will was persuaded to invest in immediate short term gains to use this proposed route, rather than



Ridges east of Lizard Lake. Photo - B. Wood.



Mt. Sheba from the SW. Photo - B. Wood.

cautiously looking for safer route options. With Karl at the front, a surprising number of peak addicts came out of the closet and followed him up the initially shallow slopes which gradually steepened and passed between bluffs so that choices of the route were reduced to some very airy traverses on loose footing. I, for one, began to feel “tense” (a politically-correct term for scared) and was relieved when some at the rear of the group decided to bale out. Those at the front were soon murmuring disapproval of the route, and so we warned Karl of the impending mutiny just as



Norbert and Mt. Sheba from above Deer Pass, looking E. Photo - B. Wood.



Looking N in the meadows above Eldorado basin. Photo - B. Wood.

he was warming up to tackle a horrible looking bluff. Peer pressure was increasing and eventually became irresistible, and so we all baled.

Thankfully we each returned in one piece to the starting point, where we had lunch and contemplated other less risky options. With full

bellies and boosted blood sugar we set off towards the shallower E ridge which looked more inviting and solid. Most of us easily made it up this ridge to the airy twin summits, where many photos were taken of people in hero's poses, and of the distant Dickson, Bendor and Shulaps Ranges, thus boosting the corporation's share value without incurring huge risks, a rare example of a win-win investment. As with many of the peaks here, the N face of Mt. Sheba has very steep snow and does not look inviting except perhaps to extreme types. This was a superb place and the peak-baggers were tripping on their highs, and therefore easy to please. We decided to camp near a small tarn on the SE side of Mt. Sheba. A late afternoon siesta followed, and all agreed that the leisurely style of the day's distance of 8 km was preferable to a more energetic trip style, which is what it would have been if we had set off initially to bag Mt. Vic. This was our highest camp so far at about 2380m and it soon cooled down in the evening.



Looking N from the ridge W of Mt. Sheba.
Photo - B. Wood.

Day 8 - Saturday's dawn was clear and cold, and Friday's threat of a change in the weather was a distant memory. Even though the melt water from our nearby snow patch had frozen overnight, or perhaps because of it, we were on the trail by 7.30 am and following our broad ridge into the sun. The N side of some parts of the ridge had amazingly-shaped, multi-coloured geological formations which resembled children's fantasy drawings of spikey castles. To the N we could see unusual shapes of other local mountains, such as Cardtable and Castle, with a background of snow-covered peaks on the horizon. There were

also a few signs of logging in the nearby valleys to remind us of the ever-present threats to this landscape. We saw a surprising number of birds on the ridge, and the warm air was filled with their songs, and everyone seemed to be appreciating this feast for the senses. We had not seen any other parties in the last week, and now the first and only sign of "civilisation" to spoil the moment was the Tyax float plane shuttling people between Warner and Tyaughton Lakes.

We were approaching the "vague discontinuity" of the route shown on the BCFS trails map, so we visited the obvious last bump on this ridge ("Open Heart Mountain") to maximise our views before the descent. We could now understand why the cartographers had a problem, because on the N and E sides of the ridge we could see steep talus slopes reaching down into trees in the valley surrounding Spruce Lake, about 300m below. While debating which side might be the easiest for us to descend, John S. spotted 3 grizzly bears, where the bottom of the N side talus slopes ran into the trees. John spotted these bears *without binoculars*, and some of us *even using binoculars* and knowing the bears were there had trouble finding them in the open bush. We spent at least half an hour enjoying this privilege of the wilderness before agreeing that the E slopes offered the best route off the ridge. Most of us used our ice axes or hiking poles for the long descent of the talus slope which looked bad until Norbert took off like a mountain goat and showed us how to schuss talus. It was a dusty and hot descent, but we were soon in the trees, and eventually joined up with the network of trails which surround Spruce Lake.

We had lunch in the shade of trees, and then tried to extricate ourselves from this confusing area. I have been told that Spruce Lake is the most frequently visited area around here, due to easy air access to nearby commercial operators, private cabins and two BCFS campsites situated around the lake. We found that the map and the trail signs (or the lack of signs) cause problems, and in frustration we did a 1 km compass march due E through light bush, knowing that eventually we would encounter the Spruce Lake trail extending N from the Gun Creek trail. We could not have missed this wide, mountain bike tire-rutted main

access trail and were about 1 km south of Spruce Lake when we hit it at about 3 pm. As it was Saturday, no-one wanted to camp at or even go to Spruce Lake, and so we followed the main access trail S and then set off up the well-signed “High Route”. We were at about 1600 m, and in the trees so it was not overly hot and the climb was relatively gentle but we were soon sweating. The plan was to stop at the first reasonable looking campsite, which would be the lowest campsite of the trip because we did not expect to get far up the trail towards Windy Pass. The trail followed a small creek and when a reasonably level area appeared there was an enthusiastic search to find suitable sites. We were pleasantly surprised that the expected bugs did not appear in spite of the surrounding ground being boggy. We were close to Spruce Lake and expected the trail to be busy, but we saw only two hikers and two mountain bikers - the first “new” people we had seen in a week. I was surprised that it was so peaceful as we settled down on a weekend evening.

Day 9 - Even in the trees we could tell that Sunday was going to be another clear and sunny day, so we were on the trail at 8 am to get the climbing done in the cool of the morning. The trail was obviously well used, but it was mostly in good shape as it wound its way through some pleasant meadows and other areas which would have made excellent campsites. It was about 10.30 am when the front of the party reached Windy Pass at about 2300m, but because we were spread out it would be a while before the rear of the party reached it. Karl, our intrepid peak-bagger, could not just sit down at this treeless and windless pass to wait for the others, so he started to explore a horse trail extending south to a bump on a scenic ridge - “Windy Pass Mtn”. By now Jenny and John S. had started up along the ridge, but they joined us on the descent. Back at the pass the others wanted to move so we started descending the trail alongside Eldorado Ck. into Eldorado Basin where we had lunch and watched a group of mountain bikers cruising by on another trail. There were not so many wild flowers here, and we later learnt that one of the commercial outfitters did not pack in forage for its horses, and consequently the horses ate the wild flowers. We started to climb again, and passed through some

colourful flowered meadows before reaching a new-looking and well-secured cabin in the mid-afternoon. Here the trail divided and naturally the party split into two groups. The group taking the northern branch arrived first at the top of a no-name pass at about 1800m where there were interesting outcroppings of glassy green serpentine rock. In the nearby hills there were many multi-coloured talus slopes which looked to me like old mine workings, but Karl thought they were natural mineralised outcroppings. As the weather was still settled we felt this spot would make a fitting last campsite for the trip, so we pitched our tents in little dry sandy patches. While John and Jenny, and later Bob and Norbert, went to explore yet another distant bump for views into Taylor Basin, the rest of us laid back with afternoon tea to enjoy the view. Three stretch-Lycra-clad young mountain bikers appeared from behind. They told us they had come from the south end of Taseko Lakes in two days, and were heading to Tyax Lodge for that evening. It was a special place to spend our last night as a group, and eventually everything turned out fine – the intrepid four arrived back from their late afternoon jaunt at dusk when we were treated to a stunning gold and black cloud sunset. That day the main party did about 15 km, our longest distance of the trip, but of course the intrepid four exceeded that distance.

Day 10 – Monday was again cold and clear, and we started on the trail at 7.30 am! What an amazing group for early starts! Now, like a herd of thirsty cattle sensing water after a long hot and dry cattle drive, there was no stopping this stampeding party as it romped down the easy trail along Pearson Creek drainage. There was a brief stop to reassemble the party where the trail joined an old road, which in turn led down to broad trails to bring us back to Tyax Lodge before noon. We had done about 11 km, mostly downhill, in about 4 hours, so we were obviously getting fitter. As usual one wishes that one could have been this fit at the beginning of the trip when it would have been more useful than at the end. We all took showers, changed into clean clothes, and had drinks in the bar. Karl and Bob then confessed that Bob had found the marmot jaws and Karl had hidden them beneath the snow in my cooking pot that evening above Deer Pass, so perhaps I was not quite as

dozy as I thought. Everyone agreed it had been a successful trip due to the compatible group, superb settled weather and very scenic trails. There is still one thing left to do, which is to protect this special relatively unspoiled area from industrial resource extraction so that wildlife and future generations can enjoy it as we did.

**Natural History Notes - South Chilcotin
Traverse
25 July – 4 August , 2003
by Karl Ricker**

1.0 INTRODUCTION

Located between the Fraser River on the east and Taseko Lakes on the west, it has long been known that the South Chilcotin wilderness is a naturalist's and outfitter's paradise, and a miner's past bonanza. Located on the extreme leeward side of the Coast Mountains, the Chilcotin Ranges are very amenable to horse traffic. The outfitter, rancher and miner pushed the development of trails on horse into the core of the wilderness from several directions, soon to be followed by the naturalists that focussed their attention on the alpine areas with its excellent display of flora. Winter snow is quick to disappear from the ridges, which provides an early summer advantage over areas in the Pacific Ranges to the west.

The underlying geology has a role in this botanical advantage as well. The area lies within the Tyaughton Belt, north-eastward of the Coast Plutonic Complex, of which the former was a "successor" basin, receiving erosional detritus from the Complex to the west, and from lowly uplifted mountains to the east, throughout much of the Mesozoic Era, 65 to 230 million years ago. This basin was an elongated inland sea, punctuated with eruptions from volcanoes that appeared throughout the periods of erosional detritus being carried into the sea. The sediments were lithified by burial and by subsequent forces of uplift to produce strata easily eroded and hence a soft underfoot to horse traffic. The breakdown by weathering into fine particles with abundant available nutrients also assisted the biota. These nutrients were absorbed by the flora to promote luxurious growth and a dazzling array of flowers. The botanists and ecologists were enthused and

hence numerous summer camps by naturalist groups became a normal fixture in the area. While the area enjoyed this sort of traffic over the last century, it also included the hunting parties and the prospectors. Several small mines were developed in the area west of, but near Tyaughton lake; all focussed on gold because it was the only commodity that could easily be "raw-hided" to market. Exploration still continues today, although the commodity scope is now much more diverse and, unfortunately, it is the mining companies that are the main hold up to a final resolution of protective park status for the area.

But the land uses noted above are history. The area today is dominated by the heli-skier in winter and the mountain biker in summer. Float plane access to several lakes in the region now have a 60% mountain biker load component. In summer, only the seniors, such as our motley crew tread the trails; nearly all of the younger than 40 age crowd are on bicycles, and the outfitters' cabins are no longer occupied continuously. So, country that was opened up by the horseman, which includes the ranchers to the north of the ranges, is now second fiddle to the mechanical wave, dominated by the 27 speed light weight bicycle.

2.0 GENERAL GEOGRAPHY

The topographic grain is dominated by a WNW ridge trend, but around Lorna Lake the pattern is interrupted by a NE directed ridge system which descends to blend into the incredibly flat-surfaced Chilcotin Plateau, locally identified as the Dil Dil Plateau. Maximum elevation is about 2906 m, dubbed "Sluice Mtn.", on Warner Ridge and the lowest elevation is about 985 m at Tyaughton Lake. Throughout the trip area, however, alpine ridge tops were hiked (2300-2400 m) and valley floors crossed on traverses at 1675 to 2000 m. This provided a near bush-free adventure, the mid-reaches of Lizzard Creek valley being the exception. Lakes are surprisingly few throughout the traverse, and the largest (Lorna) is at the headwaters of Big Creek which drains out through the Chilcotin as a 1-2 km wide, low-gradient valley neatly incised 250 m below plateau surface.

In terms of physiographic nomenclature, the trekking was through a small part of the **Chilcotin**

Ranges which are on the eastern-most flank of the Coast Mountains. The Chilcotins are dominated by complex interlayered sequences of erodible sedimentary and more resistant volcanic rocks (the Tyaughton Assemblage) which outcrop mainly to the NE of the “through valley” demarcated by Gun Creek (draining SE) and Denain Creek/Taseko River (draining to the NW). South of this prominent “furrow”, mountains are underlain predominately by granitic rocks of the Coast Mountain Plutonic Complex and are mantled by expansive ice sheets, the two prime characteristics of the **Pacific Ranges** of the Coast Mountains.

In terms of biogeoclimatic zones the leeward, drier, and more continental position places the Chilcotin Ranges in the Montane Spruce zone below 1600 m, the Engelmann Spruce - Subalpine Fir zone between 1600 m and 2000 m, capped, of course, by the Alpine Tundra zone. At Tyaughton Lake level, and valleys surrounding the Chilcotin Ranges, lies the Interior Douglas-fir zone extending upslope to about 1200 to 1300 m elevation. Permafrost underlies much of the area above 1800 m because the annual average temperature is below 0°C.

3.0 GEOLOGY

I was totally unprepared to meet the complex array of geological formations that generated the magical hues of rich colour in the South Chilcotins. Overlying the rock was a curious mix of furrowed and ridged landforms: giant earth flows, rock glaciers, ice cored moraines and solifluction phenomena. Obviously it was a geologist’s paradise. Rubble mantled almost all slopes to hide underlying rock and conceal contacts to neighbouring rock units. Resistant volcanic rocks dominated the cliff bands, but elsewhere its rubble generated underlying mystery. What follows is a simplification of what we wandered upon, and a 1:50,000 scale geological map, which doesn’t yet exist, would be needed to properly illustrate a careful description.

3.1 Thumbnail Geologic History

Three geologic “terrane” underlie the area covered by the traverse: **Methow**, W of Spruce Lake; **Cadwallader**, E and W of the lake; and the **Bridge River**, about Tyaughton Lake and creek

basins to the SW. The **Bridge River** is an exotic remnant of a deep oceanic basin with a protruding island arc of volcanoes. It was “rafted” toward the North American continent about 150 to 200 million years ago. The age of the rock is 200 to 300 million years (Mid Carboniferous to Mid Triassic). The **Cadwallader** is somewhat younger (Mid To Upper Triassic), and its main lithologic origin is from a volcanic island arc with flanking marine deposits that are coarser than those of the Bridge River. The **Methow** is another wandering terrane which represents the slope of an oceanic basin, near land, with an overlying sediment cover which was derived from nearby volcanoes. It is the youngest of the terranes, being Upper Triassic to Mid Jurassic in age. The three terranes were linked together by deposition of a common overlying strata before Mid Cretaceous time (about 100 million years ago) when it is known that the **Methow** was “docked” against the “accreting” edge of the North American continent.

The overlying linking strata were deposited into a narrow basin, termed a “successor” basin, because the sources of sediment were from the uplifted portions of the terranes around it, brought about by the upwelling of granitic magma beneath them. In the geological literature this successor basin has been named the **Tyaughton Trough** — an elongated enclosed marine basin that was filled with terrigenous detritus and intermittent puffs of debris from volcanism. The rock units in the **Trough** are almost as old as the **Methow Terrane** itself, beginning in Mid Jurassic, 165 million years ago, and terminating nearly 100 million years later in the Upper Cretaceous, with the top of the youngest formation (Kingsvale) eroded away. That is, the Kingsvale could be younger but by this time the “docking” of yet other terranes to the west was causing compression; the **Tyaughton Trough** was being elevated above sea level; its strata were being folded and broken up into fault-blocks, intruded by small granitic bodies or extruded volcanic outpourings; and the entire Trough was also being slid horizontally to the southeast between two huge transcurrent or “wrench” faults, the **Tchaikazan** to the southwest and the **Yalakom** to the northeast.

Between these two alleyways of mobility lies today’s “South Chilcotin Mountains”, the crest of

what was once the centre of deposition of erosional detritus in the Tyaughton Trough. The demolition of the basin by tectonic forces had ended by 7 to 10 million years ago. More passive uplift and accompanying erosion of the rocks in the basin has been operative to the present. However, there was one significant “burp” (or series of many gasps) in this final interval; the outpouring of lavas onto the Chilcotin Plateau, which extended to the ridge tops bordering it on the south. Because there is little plateau lava left today in the South Chilcotins, one can only surmise that much erosion of the landscape has occurred in the last few million years, some through more uplift and much wrought by glaciations which blanketed the entire area, save a few protruding nunataks, several times in the last two million years, the last being 10,000 to 30,000 years ago.

3.2 Geologic Formations Traversed

Most of the geology is taken from a very cumbersome and difficult-to-read map, compiled by Tipper (1978) of the Geological Survey of Canada, his second attempt at mapping the area after the first (1963) was incomplete and perhaps overly simplified. For the Spruce Lake and Eldorado Mountain area Tipper relied on the more detailed work of Cairnes (1943) who focussed on the mineral deposits, then undergoing development, but now long since abandoned. Tipper’s mapping, however, uses 51°00’ as a boundary cut-off. Mapping by BCMC’er Woodsworth (1977) covers the area south of 51°00’, and the product is much easier on the eye (and the mind), without question. A full geological report by either, however, is wanting and one is forced to rely on summary treatises (e.g. Gabrielse and Yorath, 1991 or Roddick et al. 1979) at regional overview level, as to how the local geology fits into the overall picture.

The following arrangement of rock units is from oldest to youngest, unlike the conventional arrangement shown on the margin of a geological map or on a table of formations. Where the unit was traversed is also noted by reference to the geographic sketch map or by the day count over the course of the 10-day trip. Days 1 and 2 are at Lorna Lake and surroundings, and Day 10 was in

the Pearson Creek drainage basin closing out at Tyaughton Lake.

Pennsylvanian (Mid Carboniferous) to Middle Triassic

Bridge River Group (undivided) – chert, argillite, greenstone, basalt, minor limestone, serpentinite and peridotite ultrabasic pods. Upper E branch of Eldorado basin, Pearson Ck. basin and Tyaughton Lake. Days 9 and 10, the camp between the two was beside a pod of well displayed serpentized ultrabasic rock measuring 100 m long by about 30 m wide.

Upper Triassic

Cadwallader Group (Noel Fm, base of group, not encountered)

Pioneer Formation – greenstone, basalt, volcanic detritus, argillite and siltstone. North slopes of Mt. Dorrie, Tyaughton-Lorna pass, upper Lizzard Ck. basin and ‘Stone Net’ Mtn. Days 1, 3 and 4.

Hurley Formation – gray to black argillite and phyllite, limestone, chert, volcanic tuff and andesite; minor conglomerate. From Spruce Lake to Windy Pass and N branch of Eldorado Ck. basin. Days 8 and 9.

Upper Triassic to Middle Jurassic

Tyaughton Group (Methow Terrane) – formal regional formations not defined, 2 units recognized locally:

Basal Triassic Unit – massive limestone, red conglomerate, limey greywacke, gritty sandstone, shale. Crossed on Windy Pass trail near Day 8 campsite.

Jurassic Age Unit – Dark gray to black shale/argillite/siltstone and greywacke. E of Spruce Lake at trailhead to Windy Pass. Day 8.

Middle Jurassic to Lower Cretaceous

Relay Mountain Group (overlies the above Tyaughton Group) – formal regional formations not defined, 3 units locally recognized.

Middle Jurassic Unit – dark gray shale/argillite, greywacke, brownish pebble conglomerate. Mid reaches of Lizzard Creek, Day 4.

Upper Jurassic Unit – diverse sediments, present only on the ridge crests N of Tyaughton Creek.

Lower Cretaceous Unit – interbedded siltstone/ greywacke, minor cobble conglomerate and limestone. Upper Tyaughton basin meadows and lower Lizzard Creek in a series of imbricate thrust sheets (i.e. repeated exposures of same units) but poorly exposed in forest-covered area (Day 3). Also W side of Spruce Lake under forest cover (Day 8).

Lower Cretaceous

Taylor Creek Group (overlies Bridge River, exclusively?) – no formal formations defined but two units (facies) are locally recognized; the volcanic not present in the area traversed. The marine sediment facies is of recessive shales, chert pebble conglomerate and siltstone underlain by greywacke, sandstone, and black shale. N side of Lorna-Tyaughton pass, lower slopes of “Open Heart” Mtn. to meadow level. Days 3 and 8.

Upper Cretaceous

Kingsvale (Spences Bridge) Group – no formal formations defined, two local units or facies recognized:

Marine Sediment Facies – greywacke, shale, conglomerate. Occurs on “Deer Pass” Mtn. summit area at campsite, end of Day 6.

Volcanic Facies – broad spectrum of pyroclastic deposits, some flows and related water carried sediments. Widespread, Day 6 and Day 7, Lizzard basin to west side of Mt. Sheba. Several faulted slices of the unit were traversed, but the actual fault traces were only rarely seen.

Tertiary (Eocene Epoch)

Intrusive and extrusive smaller granitic and volcanics – stocks, sills, “plugs”, sheets and domes — feldspar porphyry, granodiorite, quartz diorite and felsite (volcanic) equivalents. The largest body is the low ridge between Lorna Lake and Sluice Ck., of granitic rock, becoming felsitic up valleys on both Sluice Ck. and beyond Lorna Lake (Days 1, 2). A smaller body outcrops on the E side of Lizzard Ck. (Day 3, 4), and sills of granitic rock are on the saddle S of “Stone Net” Mtn. (Day 5). ‘Big Cairn Mtn’ (Day 6) and Mt. Sheba (Day 7) are distinctive pale coloured platy to columnar jointed cones that have pierced

through the Kingsvale volcanics. Two smaller basalt ‘plugs’ are also exposed on the W side of Eldorado basin (Day 9).

Tertiary (Eocene-Oligocene?)

Sheba Group – no formations recognized, and may be a resistant and distinctive colour phase of the Kingsvale Group – buff brown to mauve dacite to rhyolite volcanic flows, breccia and tuffaceous pyroclastic derivatives. Warner Ridge and Mt. Dorrie (Days 1, 2), “Lizzard” Mtn. (Day 5), and “Sheba” Lake to “Open Heart” Mtn. (Day 8).

Tertiary (Miocene-Pliocene)

Chilcotin Group – no subdivision into formations but known as the “Plateau Basalt”; olivine basalt and lesser andesite flows with minor breccia and tuffs. Extensive on Dil Dil Plateau to the N but only local remnants on ridge connecting Mt. Sheba and “Open Heart” Mtn. (Day 8).



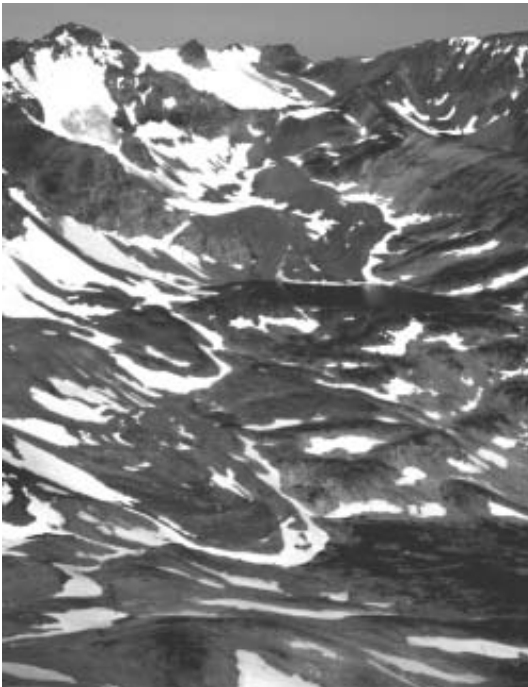
Mt. Sheba, an Eocene extrusive volcanic feature, from Deer Pass Mtn. Photo - K. Ricker.

3.3 Glacial and Periglacial Features

The ridge tops traversed were rounded, suggesting modification by an overlying Cordilleran Ice Sheet. Hard evidence in the form of smooth polished rock outcrops or exotic out of place stones, however, was hard to find. Disintegrating volcanic and sediment rubble dominated the areas traversed. Higher summits on Warner Ridge and Trail Ridge may have protruded above the ice sheet, although seemingly out of place rounded granitic boulders were found on the slopes of “Stone Net” Mtn. up to 2530 m, well above the saddle (2450 m) which is covered with many larger boulders, some probably of local origin from the dykes and sills which cut

through the volcanic strata. On the valley floor, hints of regional ice cover are shown by the low hummocky ridges at the N end of Lorna Lake.

Glaciers, though small, are abundant on the Warner Ridge trend, the largest lying at the head of Lorna Lake valley. At the head of neighbouring Sluice Ck. valley the recession of its headwall glacier is very evident at all levels from significant snout retreat at the base (2300 m) to considerable thinning at 2750 m. In Lizard Ck. basin, shrinking glaciers have ice-cored moraines extending beyond their present termini. Well-developed longitudinal and transverse ridges and furrows are obvious on their surface. A glacier, which at one time terminated in Lizard Lake, as shown by two ridges of latero-terminal moraines in the lake, has now receded way upslope to about 180 m in elevation above the lake surface. Further E, glaciers are small and scarcer, with the exception of the well-shaded "icefield" on the N side of Mt. Sheba. It too has a spectacular ice-cored moraine at its terminus. Cirques to the E of Mt. Sheba do



Reptile Mtn. (left) and lake with ice-cored moraine below left of lake, as seen from Solomon Mtn. Photo - K. Ricker.

not have any glaciers at present and were likely not ice-filled over the last few centuries.

Declining precipitation to the E is reflected by an array of periglacial features, largely developed in the presence of underlying permafrost. Large-scale forms are rock glaciers, of which the above-noted "ice-cored moraines" are a variant. The trail, which swings around S of Mt. Sheba, climbs through the active frontal face of a classic rock glacier, derived by rock fall onto a basin floor where the accumulation lies over permafrost. The cold blocks attract a frozen film of moisture to assist downhill movement – a crude simulation of ball bearings.

Two larger rock glaciers on the E wall of the valley headed by Sheba Glacier have descended to creek floor level pushing the flood plain against the W side. Spectacular rock glaciers lie on the ridges N of Tyaughton Valley, but some adjacent similar features, however, are giant earth flows – derived by slope failure.

Small periglacial features of interest are the succession of flat steps in the debris. Coarse rock rims surround them. They adorn the rubble slopes of many mountains. The best series are on aptly christened "Stone Net" Mtn. A series of steps leads from the saddle on its S side (2500 m) to the very summit at 2850 m. In Sluice Ck. basin, above tree line, the alpine tundra is festooned with steps of shrub-covered turf. These are "solifluction lobes" which move slowly downhill, caterpillar tractor tread style, when saturated during spring runoff. On many debris slopes above the alpine turf zone, there is a pattern of alternating fine and coarse stripes of debris, but on flat areas the coarse becomes a "stone circle" network surrounding a pad of fine debris. Between the latter (a "sorted stone polygon") and the former (a "sorted stone stripe") are transitional tear or festooned-shaped forms – a "stone net". The sequence is well-displayed on the saddle S of "Stone Net" Mtn. above Lizard Lake. East of Lizard valley the rubble is much finer and the frost-induced conventional sorting of debris does not develop well-organized patterned ground features. Stone stripes are obvious about the slopes leading to Deer Pass but are much scarcer and poorly developed on flat ground.

One other feature of note is the lake on the bench on the W side of Lizard Ck, which attracts the outfitters with their fishing clientele. The basin is at the base of a significant avalanche slope. The opposite shoreline, furthest away from the avalanche, has a raised rim. The lake basin appears to owe its origin to avalanches whereby debris in and on the snow is carried, rolled, slid, etc. to the outer rim during avalanche season. Melting of the snow leaves a kettle depression which deepens year by year as the outer rim of debris continues to build up. This is referred to as an “avalanche rampart basin”.



Sluice Mtn. and Glacier above Karl. Photo - K. Ricker collection.

4.0 FAUNA

4.1 Mammals

Hoofed animal trails across scree slopes are prevalent throughout the South Chilcotins. Some are generated by outfitters on horses, but these are usually obvious by the shallow inclination of the track, and deeper rut. The preponderance of trails did not produce many sightings. Our sightings were –

- Black-tailed (Mule) deer – Lorna Lake trail near Big Creek, one animal
- California big-horn sheep – a herd of 4 in Lizard Lake basin; and another herd of 9 on a broad ledge, north-west side of Solomon Mtn.
- Pikas – heard, rarely seen throughout
- Marmot – colonies in Upper Tyaughton basin (alpine area), few at Deer Pass
- Mountain goat – tracks only, above Lizard Lake
- Fisher – Lizard Creek valley, seen by other party members
- Wolf – tracks, at alpine tarn near ‘Open Heart’ Mtn.

4.2 Birds

Populations in general were scant, as is typical in the heat of mid-summer. Lack of alpine berries was also a contributing factor for the low abundance. Nonetheless, there were a few surprise sightings:

- Barrow’s golden-eye – 3 on Lorna Lake and 3 on the avalanche-generated pond, mid-Lizard Ck. Basin
- Harlequin duck – single female at Lizard Creek low level camp, another or same bird on alpine lakes next day in Lizard Creek upper basin
- Turkey vulture – one curious fly-by while on the summit ridge of ‘Sluice’ Mtn., Warner Ridge; definitely unusual
- Bald eagle – 2, approach road to Tyaughton Lake; another in Eldorado Basin
- Great horned owl – 1 between Spruce Lake and Windy Pass, Day 8
- Spruce grouse – hen with flying young near Lorna Lake camp, another family in forested zone of Lizzard Creek valley
- White-tailed ptarmigan – several in Sluice Ck. valley, several families in alpine zone of Lizzard Ck. valley, one juvenile near ‘Open Heart’ Mtn.
- Spotted sandpiper – probable breeding in Sluice Ck. valley; 1 or 2 at Lorna Lake campsite; several breeders in upper Lizard Ck. valley
- Sandpiper sp. – one at Lorna Lake camp, possibly a Baird’s or Semi-palmated
- Rufous hummingbird – ‘Sluice’ Mtn. at 2700 m
- Calliope hummingbird – 1 at Lorna Lake camp
- Kingfisher – 1 at Lorna Lake camp
- Northern flicker – between Spruce Lake and Windy Pass

- Barn swallow – several at Tyax Lodge, Tyaughton Lake
- Violet-green swallow – several at Tyax Lodge, Tyaughton Lake
- Northern rough-winged swallow – several at Tyax Lodge, Tyaughton Lake
- Gray jay – 2 at Lorna Lake, several in Pearson Creek basin
- Clark's nutcracker – ubiquitous in small flocks; Lorna Lake, Tyaughton-Lorna pass, Lower Lizzard Ck., Lizard Lake basin, 'Stone Net' Mtn. summit, Mt. Sheba camp, Windy Pass basin, Eldorado basin and Eldorado-Pearson basin divide
- Raven – few in lower Pearson Creek basin, surprisingly not seen elsewhere
- Mountain chickadee – Sluice Creek valley, Eldorado basin, Windy Pass basin
- Boreal chickadee – Lorna Lake camp
- American robin – Tyax Lodge, Lorna Lake camp
- Hermit thrush – Lorna Lake, Tyaughton-Lorna pass, Lizard Creek basin
- Varied thrush – Windy Pass basin, Pearson Creek basin
- Pacific slope (?) flycatcher – Windy Pass basin
- American pipit – Tyaughton-Lorna pass, Lizzard Lakes, Mt. Sheba, in 1's or 2's, flock at Windy Pass
- Horned lark – Mt. Sheba - 'Open Heart' Mtn. ridge crest, several
- Winter wren – Spruce Lake, one only!!
- Dark-eyed Oregon junco – Tyax Lodge, Spruce Lake, Eldorado-Pearson basin divide, Pearson Creek basin – scattered small flocks
- Song sparrow – Tyax Lodge, Lorna Lake – singles
- Golden-crowned sparrow – Eldorado basin, two only
- Rusty blackbird – flock at Windy Pass
- Red crossbill – Upper Lizzard Creek valley, uppermost Lizzard Lake – few
- Gray-crowned rosy finch – Warner Ridge, 'Side-tracked' Mtn., Deer Pass, Mt. Sheba – 2's and 3's only
- Finch sp – female at Tyax Lodge
- Pine siskin – upper Tyaughton valley, Lizzard Creek valley, Mt. Sheba to "Open Heart Mtn."

ridge crest, Eldorado basin, Eldorado-Pearson basin divide – small flocks

- Pine grosbeak – Tyax Lodge, 1 or 2
- Evening grosbeak – Tyax Lodge, 1 or 2

5.0 FLORA

Our attention to the floral scene was weak, throwing out the botanical guide when the packs weighed-in too heavy. Besides, the area has had expert scrutiny several times, the level of which we would never be able to approach. So the short notes which follow are strictly the curious observations, random at that.

The highest trees in the area were situated above the uppermost lake in the Lizzard Creek basin; that is, above the snout of glaciers that entered the lake. Scattered whitebark pine (*Pinus albicaulis*) were in this area and one small grove of subalpine fir (*Abies lasiocarpa*) vied for the highest elevation which was at 2300 m.

At Lorna Lake the outlet area is smothered in a scrub birch shrub (*Betula glandulosa*) not seen to the S in the heart of the Coast Mountains. Growing in damp mucky terrain, it does not at all have an appearance of a classic paper birch tree. Smaller clumps of this bush were also found in Sluice Ck. valley and at one or two spots in Lizzard Ck. basin. Scrub birch dominates on the northern mountains of B.C. and especially in the Yukon. It is an indicator of permafrost conditions, underfoot.

Along the lengthy ridge traverse from Lizzard basin to Spruce Lake the dominant or obvious flower is the Silky phacelia (*Phacelia sericea*). Also catching our attention because it is not typical to the south, or in fact on any mountains W of the Okanagan and the Fraser River, is the Arrow-leaved balsam root – a sunflower (*Balsamorhiza sagittata*). It was growing profusely on steep S-facing slopes of Tyaughton valley in glades at timberline. Normally the flower is associated with ponderosa pine, but in this case the trees were subalpine fir and Engelmann spruce.

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The Plummer Hut, 1969 to ? (I Hope a Long Time!) by Martin Kafer

Any mountaineer or other interested person who studies the 1:50,000 Mount Waddington (92N/6) map will not only be intrigued by the large areas of glaciation, but also by the total absence of any signs of human activity. No roads, no trails, no fields, no houses, no power or telephone lines, no pipelines, nothing of that kind exists in the close to a thousand square kilometres represented by the map sheet.

Yet, very close to the centre there is a tiny, nearly invisible square dot marked - **Plummer Hut**. This little speck of black ink represents one of the most remote signs of human endeavour in the Coast Ranges and one of the highest cabins built in the Canadian mountains. The hut was built after a tragic accident, the plane crash that took the lives of Paul and Winnie Plummer and their two young children - it stands as a memorial to Paul and his family, but also to the spirit of friendship and of solidarity within the local

mountaineering community and within the BC Mountaineering Club.

Paul Plummer was a very active member of the BCMC starting in 1963 while he was completing his study of medicine at UBC. That same year he and Winnie took part in the BCMC Rogers Pass climbing camp. I still remember clearly the sunny day when Paul, Esther and I scrambled 900 m up a steep gulley right from the highway to gain the West shoulder of Mt. Tupper, bypassed the Hermit gendarme and reached the peak after some interesting rock manoeuvres "with the highway 1500 m below on the right and Tupper Glacier 900 m below on the left – which led to the feeling that one could spit on either" as Paul described it in the Dec. 1963 B.C. Mountaineer.

Paul was also an energetic participant in the BCMC expeditionary camps to Falls River in 1964, to the Pantheon Range/Nirvana Pass in 1966, the Manatee Range (ski) in spring 1967 and the private expedition (organized by Esther and myself) to the Camel Mtn group in the Niut Range in summer the same year. He has thirty-three first ascents in the Coast Mountains to his credit.

"The climbs he enjoyed more than any others were the first ascent of the National pillar (North-East rib) of Mt. Winstone in 1964 and the first ascent of the East peak of Pagoda Mtn. in the Niut Range in 1967" (quote from a letter by B. Hagen). This latter peak has since, on the initiative of BCMC members, been officially named "Plummer Peak".

On both of these climbs, and many others, Esther and I had the pleasure of knowing Paul as a friend and very competent mountaineer, the National pillar standing out as one of the best firsts in my memory. We climbed it on August 1, the day of the Swiss national holiday and we called it "National pillar" because all four climbers were Swiss or originally of Swiss parentage. A somewhat flattering comment by Don Serl, author of the new guide to the Waddington area, classified the National pillar as *"the first modern technical route in the Coast Range, apart from a few things in the Waddington Range."* (Pushing the limits - the story of Canadian Mountaineering, by Chic Scott)

The idea of constructing a memorial cabin was embraced with vigour in early 1969 by three

BCMC members – Dave Boyd, Esthr and myself – and got a major boost when the club agreed to supervise the finances of the project, allowed the use of its successful hut design and donated the eight laminated beams required. We set up a trust fund and produced a brochure to solicit contributions from friends and relatives of the Plummer family; we appealed to club members and received donations from a large number. We finally raised close to \$2400, split fairly evenly between the three groups of donors: from doctors, mainly in Prince George where Paul had his medical practice, from relatives of Paul and Winnie and from fellow mountaineers.

Buying hut materials and equipment, helping with the prefabrication, which was mainly done by Werner Himmelsbach and carried out in his yard in Tsawassen, keeping the fund drive going and organizing the work party, took up the remainder of spring and early summer.

By that time we had decided that the hut should be built in the Waddington range on a relatively flat spot high on the Claw ridge. In 1962, after the successful ascent of Mt. Waddington, the three of us had spent three happy days and nights there bivouacking in our sleeping bags and climbing some peaks around the upper Tellot. The location has a superb view of the many high peaks on the S side of Tiedeman Glacier with Mts. Waddington and Munday standing out. It is also an excellent base for climbing the many peaks on the rim of the Tellot Glacier.

On the long four-day weekend in July, Dave and I alternately drove a rented 26,000 VW flatbed truck loaded with the dismantled hut the 800 km to Foster's Ranch at Twist Lake. For added safety we travelled in a convoy with two VW Beetles, our own driven by Esther with our two kids as passengers. It was raining most of the way and after leaving the main Chilcotin road we got stuck twice in the mud, the first time near Butler's place where the overflowing creek had washed out a bridge. While waiting for the rancher to drag it back with his bulldozer we were invited by his mother for dinner, and true to legendary Chilcotin hospitality, they gave us the use of their front room for the night.

The next day we got bogged down again

further along the private road to Twist Lake and had to be rescued by Walt Foster. He towed the truck with his large tractor the rest of the way to the ranch, where we could leave the materials for future pick-up by helicopter. In contrast, the return trip to Vancouver with the empty truck was completely uneventful.

Helicopters at that time were few and far between; there was a machine in Bella Coola, but when Esther and I left Vancouver a week before the rest of the work party was to fly in with the materials, the phone service was out and the radio phone did not work. We had no choice but to detour to Bella Coola and confirm the charter in person with the pilot. When we got there we found the helicopter engine was in bits on the floor. Nonetheless the pilot assured us everything would be ok on the appointed day and, only partially relieved, we drove back to Nimpo Lake for the short hop by floatplane to Ephemeron Lake at the foot of Tellot Glacier.



Icefall near the Plummer hut. Photo - M. Kafer.



Plummer hut (circled) and Claw Pk. Photo - M. Kafer.

Esther and I spent the next one and a half days carrying our heavy packs with some construction tools, food for a week, tent, and mountaineering gear up the glacier through the icefall and to the proposed hut site. There we set up camp and selected the actual spot where the hut now stands. During the few sunny days until the arrival of the first helicopter flight (and after the remainder of the work party had left) we enjoyed two easy climbs, Mts. Dragonback and McCormick and the somewhat more challenging twin peaks of Mt. Dentiform.

Finally 29 July arrived, we marked a landing area for the helicopter and stamped out a welcoming "Hi" beside in the snow, but the weather was doubtful and only late in the day we heard the anxiously awaited machine. The initial flight delivered some large pieces of the cabin and the first members of the work party – Bren Moss, then President of the BCMC, and Jack Bryan.

Next day everything went like clockwork, the chopper brought all the hut materials and five more workers with their kit, including Paul's brother and two of his doctor friends, as well as the Nickerson couple who had climbed with Paul and us from the Niut camp. They had left their own private plane on Ghost Lake so that they could leave independently.

Most of the bulkier lumber pieces were dropped about 200 ft below the ridge, so we spent most of the rest of that day carrying the lumber and plywood up to the cabin site. We also had to move what seemed like many tonnes of rock to level a base and the same rocks and more had to be moved back to anchor the cabin floor frame once we had it up.

Two and a half days of glorious sunshine went by and here we were looking at the most awe-inspiring mountain scenery with no time or leisure to climb. We were all working frantically, constructing the cabin with more zeal than skill – there was not a single carpenter in the crowd. First the floor frame filled with rock ballast and the



Plummer hut under construction, with Esther carrying rocks to anchor the hut (above).

Photos - M. Kafer.



carefully spaced and plumbed gothic arch beams joined with plywood gussets, loft support beams and plywood, the end walls with door and window openings, then cladding those walls in aluminum sheathing cut and crimped around the end frames; next the long and tedious job of nailing the horizontal cedar tongue-and-groove side walls, followed by the door and window installation.



By the end of the third day the structure was closed in except for a small section along the top. That evening we all decided to sleep in the cabin – and the storm outside put the cabin to its first durability test. Light snow started falling during the night and the three of us sleeping in the loft were dusted white by morning.



In the cold and wind of the next day we finished the alu-sheathing of the side walls with the sheets flapping like baulky kites. We all worked with numb hands, but by noon most of the job was done. That was just as well since 5 of the group had to descend the Tellot and make their way to Ghost Lake to be picked up by float plane and return to civilisation.

The Nickersons helped to finish the work for another day and then only Esther and I remained to put on the final touches, such as a set of three rock anchors, steel tie-down cables and a shutter for the back window. I added much one by four weather stripping and Esther painted the back inside wall sunny yellow and the tables green.

A few days later we left the cabin which was already in use by the first climbing party. We



View of Mt. Waddington through the front door of the Plummer hut. Photo - M. Kafer.

walked down the Tellot and over Nabob Pass to Ghost Lake, satisfied with the memory of a job well done. The creation and erection of the Plummer hut is one of the most satisfying mountaineering ventures I have ever been involved in, it ranks right up there with a very strenuous and difficult first ascent.

The cabin has, over the last 35 years, given much enjoyment and a cozy shelter to many more climbers than we will ever know. Hopefully it will continue to be a safe and comfortable, if small, refuge for many more years. This will be assured since the BCMC is maintaining it for the benefit of the many visitors who have used or will use it.

[Editor's comment – we also hope that these visitors will pay their appropriate cabin fees to the club (currently \$10 per person per night) to allow the club to continue to maintain the hut.]

Mt. Talchako & Ape Lake Climbing Camp
July 27 – August 4, 2002
by David Hughes

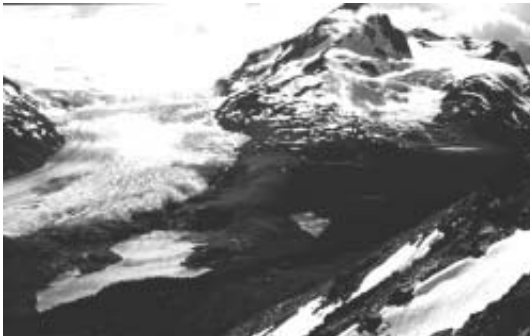
Mt. Talchako (3063m) stands completely by itself east of Ape Lake. The massif is bordered on the south by Jacobsen Ck., which drains the Jacobsen Glacier, by Ape Ck. on the west and north and by Talchako River to the east. The Talchako River is a major river draining the Monarch Icecap on the northeast side. This river effectively becomes the Bella Coola River near the bottom of Highway 20's "Big Hill"

Following a successful Ape Lake camp in 2001, a second trip to Bella Coola and Ape Lake area was planned for the summer of 2002. We again decided to fly from Hagensborg and the Bella Coola Airport. Richard Lapointe, pilot and base manager for West Coast Helicopters, again provided us excellent service. This year we flew Peter and David Stange, Kevin Dring, and Marsha Ablowitz to a camp at about 1500m on the southwest side of Ape Lake, just west of the moraine formed by the snout of the Ape Glacier. Our second helicopter flight took Erich Hinze, Theo Mosterman, Norbert Eckert, Monika Bittel and myself to a camp on the bench above Jacobsen Lake at about 1700m. This camp spot was two and one-half hours southwest from the southern side of Mt. Talchako. As per the previous year, it was raining on our flights in.

Sunday – Day 2 brought unsettled weather so the Talchako group's day was limited to exploring a route over to the base of the peak. After crossing alpine scrub and two large moraines, we found ourselves at the bottom of a long prominent gully that led to a steep snow face on the south side of the mountain. We were at about 1800m and the gully and upper snow face appeared to provide a route right to the base of the three rock summits almost 1200m up.



View across Jacobsen Ck. to Ratcliff Mtn. and Talchako River, to left. Photo - D. Hughes.

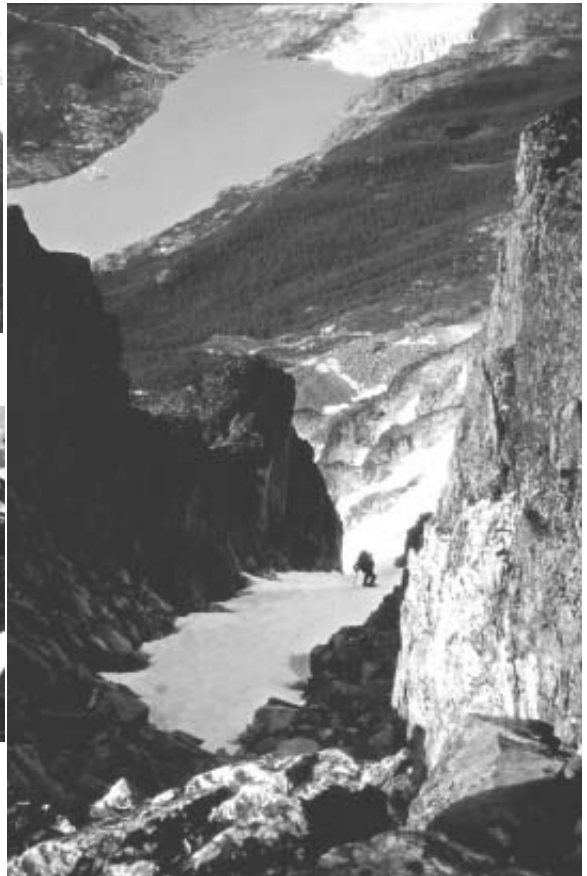


Jacobsen Glacier (left) with the camp site lake below and to right of East Jacobsen Pk. Photo - D. Hughes.

The next morning brought good weather and we were off by 5:30 am. After starting the route, we went left and followed a relatively steep snow gully that exited out on to the top one-third of the



Junker Lake with Mt. Talchako on far left. Photo - D. Hughes.



Monika in the gully on the S side of Mt. Talchako. Photo - D. Hughes.

south face. From here, we proceeded to crampon up to the west summit, the highest of the three summits, reaching the top just before noon. By this time, the clouds had enveloped the peak. From this point on and for the rest of the week Talchako was enclosed in a summit cloud that never dissipated during daylight hours.

We waited for a couple of hours on both the west summit and at the base of the central summit for a break in the clouds. Good views and pictures from the summit area were not to



Looking E over the Jacobsen Glacier (right) to Mt. Talchako (left of centre). Photo - D. Hughes.

be. We were able to get good views of Monarch and the northern mountains of the Monarch Icecap during our ascent.

On Tuesday, July 30, we returned to a glacier basin to the immediate west of Mt. Talchako. After a pleasant climb up to the glacier, we ascended a peak - Pk. 2590m - for lunch. From here we were rewarded with a view to the east and the Turner Lakes. It is from these lakes on a canoe trip in 1997 that Erich and I got the idea to climb Mt. Talchako. The N face is steep and probably very difficult and the long E ridge looks like it could have great potential. The practical problem, however, is how to get to these sides of the mountain. Both these routes are accessed from the Talchako River, which flows through a very steep valley at 450m. After lunch, we headed over to the south side of the glacier basin and to the peak on the south rim where we were able to get a good view of half the route back to Ape Lake.

Wednesday was moving day. Breaking camp at 9, we traversed high to reach a wet meadow patch that continued on the bench above the Jacobsen Glacier valley for two or more km. On reaching the end of the meadows, we headed down to Witch Lake near the Jacobsen Glacier. From here we followed the moraine separating Witch Lake and a small lake to the west, to work our way west staying well above the meadows and the Ape Creek canyon. By late afternoon, we were approaching the east side of Mt. Jacobsen's E peak. With the rain, we decided to camp at a small lake near the foot of the glacier coming off the northeast side of the mountain.

Our original plan was to strike out from here through the forest to the east end of Ape Lake about 2 km away. From our camp, we could see a col in the ridge coming down from the north side of Mt. Jacobsen. We decided to gamble this route would be a more feasible and direct route to the Ape Lake camp. This gamble paid off.

The Ape Lake group was huddled under a tarp trying to avoid the persistent drizzle that had plagued them for most of the week. They were able to get one climb in, getting to the base of Mount Fyles, named after a former BCMCer.



Ice cave at the snout of the Fyles Glacier in August, 2001 (top) and 2002 (bottom 2 photos).

Photo - D. Hughes

The next several days brought more exploring than climbing as afternoon rains kept us from climbing any further peaks. We did, however, have a great trip around Ape Lake and a chance to investigate the former Ape Lake exit at the eastern end of the lake. A dry rock canyon now exists instead of a large river. We also had a chance to visit the western exit of Ape Lake, the current outlet. The huge cave entrance under the Fyles Glacier had changed significantly since the previous year. The large entrance had flattened and widened from the summer of 2001. Exploring the bottom of the Fyles Glacier, we discovered that significant portions of the glacier's snout were caving in. The river's outlet through the glacier is undergoing rapid change and it may not be long before the river goes around the snout rather than under the glacier. If the Fyles Glacier should suddenly advance more than another major change could occur.

**Unfinished Business in Middle Ground,
20 July - 6 August, 2002**

by Lisa Baile and Peter Paré

John Clarke kept a carefully guarded list of unclimbed peaks in the Coast Mountains. In the summer of 2002 John was receiving radiotherapy, having been diagnosed with a brain tumor in March, and so he sent us on a mission to accomplish some unfinished business in "Middle Ground".

'Middle-Ground' was named by Phyllis and Don Munday when they visited the area on an epic trip up the Klinaklini glacier to make the first ascent of Mt. Silverthrone in 1936 (CAJ 24, 1936). It consists of an isolated range of peaks and pocket glaciers, which run north from the junction of the Klinaklini Glacier and River before the latter empties into Knight Inlet. John had visited Middle Ground in 1986 (CAJ 70, 37, 1987) during a long solo spring traverse between Rivers and Knight Inlets. He had put in two food drops on the way to a col ~10 km NW of Silverthrone where he was subsequently stuck for 4 days in a howling gale. John then worked his way SE to Middle Ground, making first ascents on the way. However, his plans for further first ascents were thwarted when he found that his second food drop had been devoured by a wolverine. Consequently he had a

hungry four day walk to Knight Inlet. John ended his account with the statement; "So, if you're looking for a howling wilderness with real gripping remoteness and incredible beauty around every corner, the Klinaklini is for you." We needed no further coaxing.

We teamed up with Jack Bryceland and arrived at White Saddle Air on a flawless July morning. Mike King suggested we be ready to fly in two minutes during a "window" in his busy day. On the marvelous flight we left a week's food near John's "wolverine cache" and then Mike dropped us at 1350 m in meadows at the southern end of the range. The views were breathtaking. East across the canyon of the Klinaklini rose the Coast Range monarchs: Waddington, Combatant, Remote and Jubilee. To the W we looked down on the awesome Klinaklini and Silverthrone Glaciers as they wound their way from 300 m to the 2700 m peaks over a 60 km distance. To the S lay Knight Inlet and near the glacier's snout was a silver ribbon cascading from the peaks to the W - Tumult creek which the Munday's had crossed with a spectacular "high-line" 66 years before, and John had trudged around in 1986.

For the next four days, in perfect weather, we meandered N along the height of the range. Mt Monarch provided a beacon. The glacier lilies were soon replaced by snow and ice. We found John's cairns on several 1900 - 2300 m peaks.

On the third day we arrived at almost the exact spot from which Phyllis Munday had taken her fantastic panorama of the Klinaklini Glacier 66 years earlier. We had a copy of the photo and spent more than an hour comparing it to the vista below us. Although the extent of the glacier is unchanged, it has lost at least 100 m in its depth and many of the glaciers in the side valleys are now cut off.

The fourth day we set up a base camp from which to climb the little group of 2100 m peaks which had been John's objective when foiled by the wolverine. The compact group of peaks offered some challenging class 3-4 ascents. Over the next three days we climbed 5 of the "Seven Dwarves" before a storm provided an excuse for a rest day.

We left the last two for the next visitors to this magic spot. In another 20 years?



Jack looking over snowfield to Mt. Waddington, day 2. Photo - P. Pare.



Icefall on day 12 (left). Photo - P. Pare.

Our next camp spot, 10 km to the north (Lat. $51^{\circ}32.2'$, Long $125^{\circ}42.2'$), was spectacular and offered stunning views back southward to the 900 m icefall plunging off the N face of the Dwarves. We etched the panorama in our memory and on film to report back to John.

In deteriorating weather, we spent 2 more days working our way NE along a ridge system and climbed 3 additional unclimbed (?) 2300 m peaks (Lat. – Long. of $51^{\circ}32.8'$ - $125^{\circ}40.3'$, $51^{\circ}33.6'$ - $125^{\circ}38.3'$ and $51^{\circ}33.4'$ - $125^{\circ}37.3'$).

The second half of the trip provided two cautionary tales for wary mountaineers: 1. We had a brand new 4 L can of Imperial Oil white gas in our food drop but when we opened it we found it contained an orange non-flammable liquid which smelled vaguely of naphtha! Needless to say the noodles for the rest of the week were el?al dente! **The message** - always check a new can of white gas! 2. We arrived at our exit spot on a long ridge in good time and on August 3 were up at 7 am listening for Mike King (no Mike), August 4 and 5 (No Mike!), and August 6 (Yes Mike!!!).



Klinaklini Glacier from Middle Ground in 1936. Reprinted from the Canadian Alpine Journal Vol 24, p. 32, 1936, with the permission of the Alpine Club of Canada.



Klinaklini Glacier from Middle Ground in 2002. Photo - P. Pare/L. Baile.



Looking S to Knight Inlet on day 2 Photo - P. Pare/L. Baile.

Since the weather was reasonable where we were, and we had no satellite phone or (functional) radio we had no idea what was delaying him and couldn't go more than a few hundred meters from camp in case he showed up. (Strangely the weather at Bluff Lake was much worse than on our ridge and Mike was grounded)

The message; a means of communication can provide a powerful sense of security!



The Klinaklini River, 1800m below us.
Photo - P. Pare/L. Baile.



Looking S from campsite on day 11 towards the Seven Dwarves. Photo - P. Pare/L. Baile.



Looking N (right top) and S (right bottom) to Pk. 2290m on day 4, and looking E over the Seven Dwarves (above) on day 6. Photos - P. Pare/L. Baile.

We thought of John constantly during the trip and marveled at his sense of adventure and purpose as we read and re-read the account of his sojourn in Middle Ground. He was delighted when we reported back that our mission had been

mostly accomplished but there was a twinkle in his eye when he heard we had left a few unclimbed peaks!

Columbia and Rocky Mountains

Great Divide Trail: Saskatchewan Crossing to Jasper

19-28 August, 2001

by Yurgen Menninga

With enough money saved for the upcoming school year, I quit my job as a chokerman up Knight Inlet, and headed for the Rockies. In Revelsok I came across a book titled "Hiking Canada's Great Divide Trail", and that's what I decided to do with the last month of the summer holidays.

Until that time I was only very vaguely aware of the existence of such a route, but with a little reading and speaking to people familiar with portions of it, I was eager to hike such a significant trail. The route has its beginnings at the U.S. – Mexico frontier as the Continental Divide Trail, from where it follows the Rocky Mountains north for 5,000 km to the Canadian border at Waterton National Park. Here it becomes an informal collection of existing trails that make up the unofficial Great Divide Trail (GDT), which continues up the continental divide for 1200 km to the vicinity of Grande Cache, Alberta.

I had decided to do the 210 km section from Saskatchewan Crossing to Jasper. After the required permit, payment, and reservations for the national park campsites, I drove up the Icefields Parkway highway and did an afternoon hike to drop a food cache around the half way mark. I didn't really know what my average distance per day would be, as I had never been on a hike of more than a couple of days duration. This made me unsure of how many food caches I should have, and which campsites to reserve for what dates. I didn't really know how I would get on, but took comfort in the existence of several access points to escape on, all which are only a few hours hike to the highway.

And so after a big and long breakfast, I set off from near the Saskatchewan River park warden office. After a few hours of valley bottom for warm

up, the trail then turned up the steep Owen Canyon, which is spectacularly deep and narrow – 25 m deep by 2-3 m wide in places – with occasional large boulders chocked at the top. This fascinating landform continued for several km, and was followed by an impressive hanging glacier. The scenery was off to a good start, and I strode along the slight trail (which wasn't on the topographical Trail Map), happy with the good beginnings.

Shortly after rising above the treeline, I came across a group of a half dozen guys who had helicoptered onto the pass above, which is the boundary of Banff National Park, and were to hike out the way I had come. They had set up camp, and as I came into sight some of them scurried around a bit. I noted with displeasure they had cut down a few live sub-alpine trees over which to spread tarps and fuel their fire. Dusk was approaching, so I carried on up out of sight, looking for a campsite. I eyed a flat meadow, happy at the discovery, as night fell. But, on closer inspection, I was a bit unsettled by the fresh grizzly bear diggings. So, I carried on, opting for a gravel bar farther up. Over supper, ensconced in peaks poking into the darkness, a loud gunshot rang out from the heli-hikers below. Several more followed over the next ten minutes. Nothing could be done in the darkness, and I eventually fell asleep, a bit nervous, making for a rapid departure at dawn the next morning.

I ascended the first pass (unnamed) of the trip in the cool overcast morning, happy to get further away from the other campers as quickly as possible, when more gunshots echoed around the valley. The uncomfortable experience continued, hiking up the open, alpine slope, with my back to the shooting. With relief, I dropped over the pass, and was then better able to absorb the surrounding beauty. This was the first of three high unnamed passes which were covered in 4-5 hours. Pass two was in clear view a few km across an alpine bowl which contained two small lakes. This pass is the highest on the GDT, but still has a fairly friendly approach. High as it was, I climbed from the pass up a side ridge to the east for an all round view. This ridge had the typical Rocky Mountain wedge shape, steep slope up one side, cliff on the other. I took in the views,

staying a good distance from the cliff for fear of getting blown over it in the powerful wind. Another down and up, over pass three, and I dropped into the trees to camp at Pinto Lake.

The Pinto Lake campsite seems to be mostly used by packhorse expeditions, but not often. It has become well developed over the years, with fire pits, pole structures to hang food from, and campsites suitable for several tents in each. Some groups had carved their names onto tree blazes, the most interesting of which was "Alberta Provincial Police relief party, 1924". Incidentally, there is a trail from the lake to the Icefields Highway, and using this as a point of egress would make a satisfying three-day hike over a total of four passes on a little used route, mostly in the alpine.

From Pinto Lake the trail appeared and disappeared up the long, treed, Cataract Ck. valley. Its common users were illustrated by a dry mud puddle the trail crossed, which had foot prints of a bear, wolf, and wolverine, but no humans. I had been looking forward to the ochre pictographs on a couple of prominent boulders, as described in the guide book, but must have passed them with my eyes fixed on the trail as I trudged through the forest.



From Cataract Pass looking down the Brazeau River. Photo - Y. Menninga.

After a very pleasant campsite in a large open area in the valley bottom, cliffs several hundred metres high and km long lining one side of the valley, the alpine was gained again over Cataract Pass, and Jasper National Park was entered. The view along the broad treeless valley ahead, with a wide multi-channelled stream meandering its way along the bottom and seemingly insurmountable peaks lining its sides, was of the promised land. I stopped and drew a sketch. Then I dropped down into it.



Rocky Mountain camp. Photo - Y. Menninga.

This led me onto the well beaten path. The zone of controlled camping (three days ahead of my reservation), and other people. When I had reserved the various campsites at the Lake Louise park office, I had to shuffle dates and campsites a bit, as some were fully booked. So I was relieved to find that though it was close to full, the developed campground had a vacancy in a proper designated site. The night was passed around the common campfire with a mixed group.

Rain in the morning, so I delayed getting up until it lightened. After breakfast it started up again, so I dozed until 11. Departing the 4 Point campground, I saw a 2-point caribou. Then up Jonas Pass, meeting many very wet people who had not so wisely slept in. Since the low and slight pass was a bit of an anti-climax, I scrambled up the adjacent ridge for some views: dark and stormy towards B.C. (windward), bright and sunny in Alberta (leeward).

I arrived at the next campground, night #5, at dusk. There was a friendly bunch there, who were interested in my trip. There was a nice cacophony of wolves howling nearby in the middle of the night.

Another late start due to rain and hail, but then it was just a few hours to my mid point food stash! Some fruit, candy, the following pages of the guidebook, a magazine, and I dug up the salami I had buried underwater in the creek bed. I was looking forward to a leisurely afternoon of relaxation and indulgence. Then a group of 20 British army cadets piled into camp.

A day's hike, mostly in the treed valley bottom and over Maligne Pass, where I saw a bull moose at 150 m with a rack just like the Moosehead beer moose. Then for the final stretch of alpine. From Maligne Lake to Jasper, two thirds of the 55km Skyline Trail is continuously in the alpine. There

is a long climb at the beginning, and a long descent at the end, and fortunately no arduous elevation change in between. In my journal, I recorded the following:

“Most spectacular scenery yet – on 2nd thoughts, maybe not as good as the three unnamed passes on day 2, but it was windy that day and I was cold. Cataract Pass was impressive too. Anyway, it was mighty fine.”

And so, it ranked high amongst other parts of the trip in extravagant natural beauty as far as the eye could see – the three high alpine sections jockeyed for first place. I marvelled at the uninterrupted forest cover in the valleys, filling the wide valley bottoms and creeping way up the steep sides as high as the trees could grow. I saw half a dozen mountain sheep at a distance. There were several opportunities to scramble up nearby high points, and I did that a couple of times, using too much film. Although this is the most heavily used part of trail I covered (it can be difficult to get campsite reservations), I travelled for hours at a time without passing anyone. It seems the controlled camping keeps the hordes in check.

The final day was a long hot slog into town, down a fire road, then along heavily used, wide, trails on the valley bottom (the lowest point on the 1200 km GDT). I had had excellent luck with my feet until that point. But oddly, once I got onto the smooth, even trail that led for a couple of hours into town, it was torture. The litre of pineapple ice cream at the end of the trail kept me going. I was just glad the foot problem didn't arise till the very end.

MOUNTAIN SCIENCE

Environmental Change in Alpine Garibaldi Provincial Park

by Johannes Koch and John Clague

“Is climate really changing?” “Are humans affecting climate?” These questions could arise from listening to the conflicting claims in the heated debate over the Kyoto Accord. Due to the renewed discussion, “climate change” and “global warming” have once again become household phrases. To answer these questions properly we have to understand that climate is

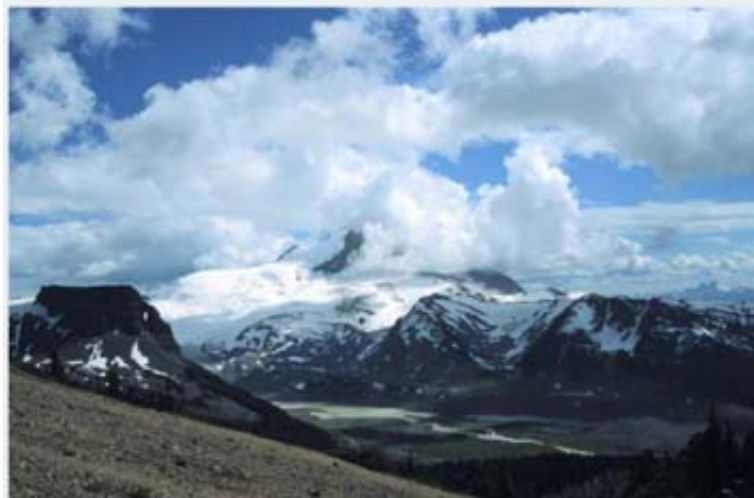
naturally variable. If we are ever to understand what our climate will be in 2050 or 2100, we need knowledge of past climates.

Alpine environments are highly sensitive to climate change and are excellent areas to search for evidence of past climates. Researchers at Simon Fraser University, University of Victoria, University of Northern BC, and University of Calgary, have begun a joint study of climate and environmental change in Garibaldi Provincial Park, a study that is focused on the last 1000 years. Glaciers throughout the Park are being visited, and evidence of historic and prehistoric fluctuations are being gathered. Changes in vegetation near and at treeline are also being documented. The ring patterns of living and dead trees will be used to reconstruct climate in past centuries. Trees indirectly store climatic information, including temperature, precipitation, and snowpack depth and duration. By measuring the width of annual rings, we can infer local climate at the time the tree added the rings to its trunk. By reconstructing past climate change in Garibaldi Park from such data, we gain a better understanding of how climate might change in the future and, perhaps more importantly, what effects changing climate will have on high-elevation ecosystems throughout the southern Coast Mountains.

In 2002 we visited Overlord Glacier near Russet Lake, Sphinx and Sentinel Glaciers at Garibaldi Lake, Garibaldi and Lava Glaciers in the Diamond Head area, and Stave Glacier in the far SE corner of the Park. All glaciers have downwasted and receded since the Little Ice Age, a period of cool climate that ended in the mid- to late 19th century. Recent recession is inferred from the barren, poorly vegetated ground in front of present-day glacier termini. Similar glacier recession has been documented in all mountain ranges in the world. Fossil wood in the moraines provides ages for several periods during which glacier cover was much more extensive than today and indicates that glaciers are shrinking to positions they last saw about 7000 years ago.

We have a unique opportunity in Garibaldi Park to directly reconstruct glacier and vegetation change from almost the beginning of the 20th century. Pictures of the Park published by the

B.C.M.C. in 1913 are proof of the changes that have taken place in the last century. Furthermore, sequential government airphotos date back to 1931, and a park survey map, produced in 1928, shows the extent of glaciers at that time. The following photographs, for example, show the terminus of Warren Glacier in 1912 and 2001. Note how much the glacier has retreated over this 90 year period. Other glaciers in the Park show similar wastage, which is due to warming of about 1°C over this period.



Warren Glacier in 1912 (top - W.J. Bray photo) and 2001 (bottom - photo - J. Koch).

Similarly, changes in vegetation in Black Tusk Meadows and on Panorama Ridge can be observed on photographs taken in 1928 and 2002. Vegetation cover has become more extensive and less patchy, as trees have filled in

islands in the former open parkland. Trees have also become established further upslope, indicating that climate became more favourable for tree growth in the subalpine zone in the 20th century.

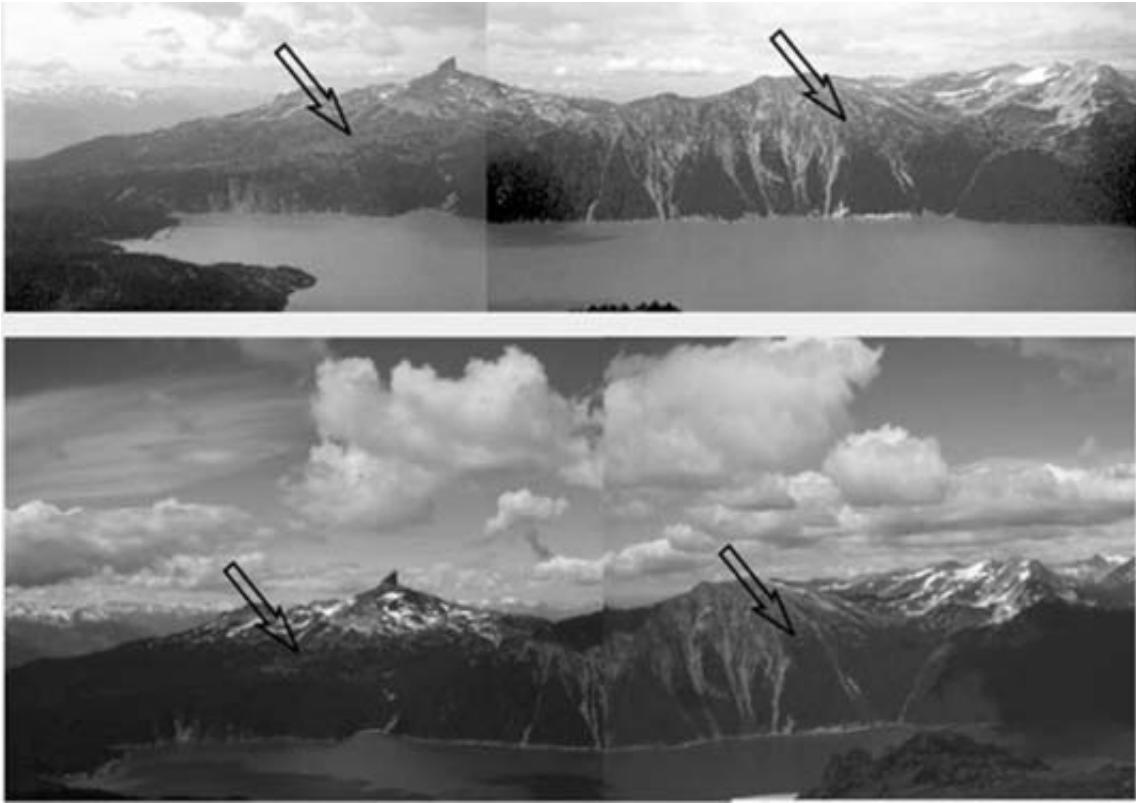
These changes have impacts downvalley from the glaciers and also affect outdoor recreation and tourism. As glaciers recede and, in some cases disappear, stream flow may decrease, affecting fish populations, power generation, and water supply. Changes in the vegetation cover can adversely impact wildlife that depend on open spaces. Furthermore, glaciers and the showy summer flower displays in subalpine meadows are eye-catchers and are a major attraction for visitors to Garibaldi Park.

We will study Wedgemount Glacier, glaciers in the Spearhead Range east of Blackcomb Mtn., Helm Glacier, glaciers in the Diamond Head area, and glaciers at Snowcap Lake in the central part of the Park. Black Tusk Meadows and Panorama Ridge will be also visited to verify and better understand the 20th century changes in vegetation cover.

Because our collection of photographs of the Park is limited, we would appreciate hearing from you if you have any pictures of glaciers in the Park dating from the period 1900-1950. Furthermore, please pass along anything that you feel would be interesting and relevant to our

study.

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Black Tusk and Panorama Ridge above Garibaldi Lake in 1928 (top - B.C. Archives I-67464 and I-67465) and 2001 (bottom - Photo - J. Koch.).

Glacier Update – 2003 By Karl Ricker

Late summer/early autumn visits to the baseline survey monuments at Wedgemount and Overlord Glaciers were carried out in 2002 and 2003. As expected, recession of their snouts and down wasting of their lower reaches continued although less so on Overlord, while on Wedgemount it has accelerated somewhat, as indicated in the table on the next page.

The trend for Wedgemount is an increase in rate of recession which, in view of recent warm summers, is not surprising. In 1991 the glacier was at the edge of the lake. As of September, 2003 the glacier snout now lies beyond the shoreline by 147 m and the elevation of the snout is now 30

metres above lake level. So there is of yet no let up on recession despite the increased elevation of the remaining ice tongue. Wedgemount Glacier is the highest glacier in Garibaldi Park with its accumulation zone beginning at about 2900 m, yet this zone has not been receiving enough snow over the past century to maintain historical growth or even equilibrium conditions. A subtle climate shift appears to put the basin on the leeward side of the axis of the Coast Mountains.

Overlord Glacier is a different picture entirely, despite the lower elevation of the entire surface. Pronounced retreat in the first half of the twentieth century was marked by a substantial advance, as reported (BC Mountaineer 1986), for the following 35 years and hence the half-century average low yearly rate of **advance**. The picture is not that rosy,

however: since 1986 the cumulative retreat is a very conspicuous 123 m or roughly 6.8 m/year. Moreover, the pattern is oscillatory with minor advances in 3 different years, and minor advances of one snout or the other in other years such as shown by the middle snout in 2003. To date the northernmost snout has remained upslope of the two snouts being measured. An ice-dammed lake at that snout, which developed over the last few years, has drained during 2003, indicative of glacier recession along the ice margin, which removed the seal for closed pondage.



Wedgemount Glacier from survey/camera stn. 6, 21 September, 2003. Ice edge to lakeshore is 147m. Photo - K. Ricker.

In September we also had a squint at Helm Glacier from the Panorama Ridge trail lookout. One arm of the glacier no longer exists and the main trunk of the glacier is very recessed and

depressed. A large shallow and silty lake now lies between its terminus and the volcanic pile which is the base of the overlying Cinder Cone.

Table. Glacier snout movement (m/yr)

	2002	2003	1951-03	1900-03
Wedgemount Gl.	-18.8	-14.3	-13.7	-13.4
Overlord Gl. - left hand (S) snout	-1.5	- 3.2		
- right hand (M) snout	-4.0	+0.4	+1.2	-10.3
Southern Oscillation index (status)	mild el nino	la nada (neutral)		



