



CROSS CONNECTIONS

FALL 2000

A Cross Country Canada Newsletter for Leaders in the Skiing Community.

INSIDE

- 5th Annual Women's Coaching Workshop Plan to Participate
- A Tribute to Tony Daffern
- Fitness and Health Advisory for XC Skiers
- 2000-2001 Season Calendar
- Canadian Road Map to a World Championship Title
- Ski-to-School Winner
- Award Winners 2000

CONTACT

 Cross Connections is a Cross Country Canada publication designed to serve as a communication device for everyone who takes a leadership role within our sport.

Editor: Jacquie Welsh

Translation: Daniel Gauvreau

Desktop Publishing: Ghislaine Forget

How to communicate with us:

Please address all correspondence to:
 Cross Country Canada
 c/o Joanne Thomson
 Bill Warren Training Centre
 1995 Olympic Way, Suite 100
 Canmore, Alberta T1W 2T6

Tel: (403) 678-6791

Fax: (403) 678-3644

E-Mail: ccanada@relusplanet.net

Visit our website for all the latest news:
<http://canada.x-c.com>

Menihek Nordic Ski Club: A Centre of Excellence

Menihek, in Montagnais, means "challenging path" or "challenging trail," an appropriate appellation for one of Newfoundland and Labrador's oldest, most active, and best developed nordic ski clubs. In March 2000, we celebrated our 25th anniversary, a milestone made possible in equal part by our early founders and a vibrant membership that carries on their enthusiasm.

The originators of the club were an eclectic mix of nationalities: Finnish, Estonian, Norwegian, English, South African and, of course, Canadians from all regions. Karl Krats, a former Canadian Junior Champion, was a founding member; now, his son, Eddie, serves our club as a Level III official. Darrell Frank, a former NST coach was instrumental in our early Junior Development programs. Vello Arumets of Estonia worked hard to develop trails and club equipment. George



The Great Labrador Loppet

Lefevre, now a world class track setter, who gets invited to most Winter Olympics for his expertise, cut his wisdom teeth at Menihek Nordic. The families of Dave Thomas, Joe Smith and Bill Dwyer all contributed greatly to the success of the club. However, it was left to Mr. Colin Jardine to put Menihek Nordic on the world scene.

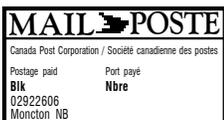
In 1981, Mr. Jardine engaged Bill Koch, famous USA World Cup Champion, to design a world class trail system in Labrador City. He then acquired the assistance of Al Merrill, a renowned American ski consultant from New Hampshire, to assist in

lining up events for the newly developed Menihek nordic facility. This was accomplished with vitality and flair, resulting in a number of key events coming to Menihek:

- 1981, US and Canadian skier training in Labrador.
- 1982, North American Championships and Shell Cup events
- 1983, World Cup Final
- 1984, Designation as a National Training Centre
- 1985, Opening Season World Cup.

Jackrabbit Johannsen, when 107 years old, served as honorary chairman of the 1985 World Cup at

(continued on page 2)



Menihek Nordic Ski Club: A Centre of Excellence

(continued from page 1)

Menihek Nordic and people like Angela Schmidt-Foster, Pierre Harvey, Bill Koch, Vladamir Smirnoff and Gunde Svan were familiar faces on our trails.

Menihek Nordic still hosts quality events. We had a very successful Master's event in 1997, thanks to, Alena Branda, then President of the Canadian Masters Association. There were ten days of great skiing to help celebrate the 500th Anniversary of John Cabot's discovery of Newfoundland. The participants were entertained by an unexpected treat, a perfect view of the comet Hale-Bopp passing through a spectacular display of northern lights!

Menihek Nordic now boasts a beautiful A-Frame Chalet, designed by local artisan James Hoskins, and an expanded trail system to compliment the world class Koch Trail. President, Gerry Rideout says, "It's great to have the contrasting types of skiing and terrain developed here. You can attack the infamous 'Koch's Delight' or

even 'The Hole' or simply enjoy a leisurely ski around the lake on the 'Dumbell Tour' or 'The Birches'. Sunset doesn't end the skiing either as the longest lit trail in the province, 'Vello's Trail', fondly known as the 401 locally, still awaits the avid skier."

Snow, snow, snow! Neige! That's what Menihek is all about and we get lots of it, from as early as October, allowing early fall and late spring on-snow training camps and providing locals with a season that can last well into May.

Youth programs are big at the club with over 115 young skiers this past season, an impressive number for any club and more impressive when you remember that the population of Labrador City-Wabush is a mere 15,000. In 1985, the club started a "Ski Mode" program for children 4-8 years (pre-Jackrabbit) and brought the Jackrabbit program from the elementary schools into the club. Racing Rabbits is another popular program at Menihek and the club has produced more and

more provincial team members. This past season, three of our young skiers went to national events: National Juniors, Eastern Championships, and National Biathlons. Our club provides all the equipment for all three programs, stored and maintained in a modern waxing facility. While our young skiers provide the growth and energy, the other heroes of our youth programs are Level II coaches Alf Parsons and Rhonda Lawrence and the twenty or more volunteer leaders, some having Level I coaching certification and others with Jackrabbit Leader courses.

The Jackrabbit Ski League is fun-based with skills development, games, and socials. Sprints for Racing Rabbits, Christmas parties, Easter Egg Hunts, and sleep-overs for all groups help promote the social aspects of our programs.

In 1986, Menihek Nordic started a School Ski Program for Grade Five students in our elementary schools. Children and teachers are bussed to the ski club. Club coaches and

leaders run the program and the club provides ski equipment which is professionally fitted. These students get four, three-hour sessions of skiing followed by warm-up around the fireplace at the chalet. This program involves over 700 ski visits and includes over 300 children, many of whom become full club members.

One of the feathers in the hat of Menihek is the availability of volunteers. The club can muster hundreds of volunteers for major ski events. In addition to the Volunteer Appreciation Night sponsored by the Towns of Labrador City and Wabush the club also has its own volunteer get-togethers where certificates, plaques, and letters of thanks are awarded. This season will see the creation of a 'Volunteer of the Month' award. In addition to duties on the ski trails, volunteers help out with 90-100 catered events at the Menihek Chalet each year. The money raised at these events helps employ a coach, chalet manager and provides support to our youth programs.

Family and community are guiding philosophies at Menihek, a fact reflected in our events and facilities. Family BBQs are regular events at the chalet—one featured four generations of skiers around the grill! Five towing baby slides, polks, allow young parents and even grandparents to enjoy the trails with their children. A sit-ski for physically-challenged skiers is in almost constant use and modern, well-maintained rental equipment allows newcomers to the sport to join in without incurring exorbitant costs in

(continued on page 3)

The Lactate Pro is the smallest, easiest to use, most accurate and reliable mini Lactate Analyzer available in the World today.



- The size of a credit card (the smallest in the world).
- Measurements completed in 60 seconds.
- Small blood sample (5 microL approximately 2mm diameter drop).
- High data precision of C.V. 3%. Stores up to 20 measurements and can average past results.
- Automatic aspiration of blood greatly reduces the risk of human error.
- ISO 9001 certified.

"The **LACTATE PRO** mini-lactate analyzer allows National Ski Team athletes to be carefully monitored during endurance and high intensity training at sea level and at high altitude. The units are easy to use, accurate, and provide instant feedback to the athletes. The **LACTATE PRO** is a very valuable addition to our program."

Dave Wood, National Ski Team Head Coach

Menihek Nordic Ski Club: A Centre of Excellence

(continued from page 2)

purchasing start-up equipment. Family and senior's rates on season passes make nordic skiing financially feasible for everyone and Menihek's membership list continues to include skiers of every age and numbers over 400 active members.



Jackrabbits on the Trail

Wax clinics by champion skiers provide educational opportunities, as do ski lessons which are available for groups or individuals on demand. A well-stocked shop on the premises is run by a skier with several decades experience under his skis and many titles to his credit who is quick to pass that knowledge on to members. News from the club is funneled back to the community through the efforts of a publicity person who arranges media interviews and provides "Nordic Notes" to the local paper. A comprehensive web presence and e-mail connect the club to those outside the local area. Level I Coaching clinics and CANSI courses are held regularly. The Club boasts over fifty Level I and II officials and one Level III.

One of the best events of

the season at Menihek Nordic is the annual Air Nova Great Labrador Loppet. Skiers can participate in one of three events (10, 27, and 54k) held on a 27-kilometer groomed trail extending from Fermont, Quebec, to Labrador City, a course used only for the Great Labrador Loppet and is open

to both classic and skating skiers. To add to the fun, skiers are encouraged to participate in teams, and to dress up in costumes. The trail provides several feeding stations and periodic rest stops. Last year, the 25th running of the Loppet saw over 70 non-resident skiers arriving to join the fun. Each participant is eligible to win a trip for two between any two points in Atlantic Canada.

Each year, a XC-ski Festival is held at Menihek Nordic in conjunction with 'Winter Odyssey', a whole series of events in the month of March celebrating winter in western Labrador.

Club president Gerry Rideout says "Going into the next millennium, the future of Menihek Nordic is very bright. We are constantly bidding for national and

provincial events, and are currently attempting to acquire a Continental Cup in Lab-West on a regular basis. We are in the midst of acquiring a new Piston Bully PB-100 groomer and building cabins at the facility for a total ski experience. The club has plans to offer six-week Fall and Spring Training Camps, allowing youth to continue school via the internet, the College of the North Atlantic, and Keyin Technical College. This coming season we're introducing a Certificate Touring Program where members log their trail kilometers and compare them to various distances across

Labrador. You'll be able to ski Labrador without leaving Menihek Nordic's trails!"

Come see us in Labrador - an experience you won't soon forget!

CONTACT INFORMATION:

Website:

www.crrstv.net/~menihek

E-mail:

menihek@crrstv.net

Snail Mail:

P.O. Box 38

Labrador City, NF

Canada A2V 2K3

Telephone: 709-944-5842

Fax: 709-944-5975

5th Annual Women's Coaching Workshop Plan to Participate

The fifth annual Women's Coaching Workshop will be held from November 17th to 19th, 2000, at Silver Star, BC. The workshop, as in the past, will be a three day event starting at 9 am Friday morning and ending 2 pm Sunday afternoon. This workshop is the second to be held on-snow and promises to be as successful as last year's event. It is being held at the same time as the Cross Country Canada (CCC) National Team training camp and the Exel-Peltonen-Start Cross Country Ski Camp. Women coaches of all levels are encouraged to attend.

The CCC Women's Committee is committed to providing opportunities for female coaches to meet and share experiences. The Committee believes these workshops will help to develop a strong network of female coaches across the country and encourage women to continue with their coaching efforts.

Through the sponsorship of the Committee the cost of the workshop is minimal at \$75.00. This registration fee covers the cost of guest speakers, three breakfasts, three lunches, snacks, a wine and cheese event and the trail fees.

If you wish to attend the workshop, contact the National Office directly by telephone at 403-678-6791 or visit the CCC website at <http://canada.x-c.com>.

Cross Country Canada's Outgoing President A Tribute to Tony Daffern

by Tom Holland

Over the years there have been a few outstanding individuals who have bequeathed a legacy to Nordic Skiing in Canada. Tony Daffern, who served as Cross Country Canada's (CCC) President from 1995 to 2000, is certainly one of those individuals. Prior to his tenure as President he served as CCC's Event Chairperson from 1991-1995 and Cross Country Alberta's Technical Vice Chairman from 1989-1981. His contributions during these years certainly place him firmly into the elite group of individuals who have given so much to our sport.

As an official Tony was one of the Blue Lake pioneers that gathered in 1981 to form the core group of chief officials for the 1988 Winter Games. Tony transferred his engineering skills and competency in detailed planning to take on the prodigious task of Competition Secretary for the pre-Olympic World Cups and other major events leading up to the Olympics, the 88 Olympic Winter Games and the 1989 World Cup in Canmore. Tony set the standard in establishing the importance of the role of the Competition Secretary.

Notes taken at one of Tony's seminars, given to individuals interested in taking on the role of Competition Secretary for an event, emphasized that in order to be successful in this position one must establish a strong liaison between the various competing teams and the race committee, make sure the race committee is organized and on track and

encourage detail in all aspects of the race organization. Those who have taken this advice soon realize how pivotal the competition secretary is to a well-run event.

Tony continued to progress as an official and served as a Technical Delegate at many Canada Cups, Continental Cups and National events. He also became an International TD, which took him as an official to Japan, Australia and the USA. Tony was also Chief of Competition for several major events. His organizational drive in steering the success of the 1995 World Masters was a notable achievement with over 1000 competitors from around the world competing in the event. He also successfully served as Chief of Competition of the 1997 World Junior Championships in Canmore, Alberta.

Georgia Manhard, who has also contributed a great deal to the area of officiating, described Tony as the 'backbone of officiating in Canada'. Tony's officiating legacy to our sport was compiled in the CCC's Official's Handbook which he parented with Norm Dymond. In this project he again applied his instinct for detail in producing an outstanding guide that combined their many years of experience. Over the years Tony's leadership abilities allowed him to be an influential mentor to many.

Tony must also be recognized for his design, construction and map layout of the Mount Shark ski trails in the 1980s. These trails

have been the site of several National and Divisional Championships and have become an important site for late season racing in Canada. Tony also designed and homologated trails at the Canmore Nordic Centre in the post-88 Olympic period that were used for National Championships and the 1995 World Masters.

During his term as President of CCC, Tony had to make many difficult decisions. The association was faced with major changes due to financial cutbacks. Toni Scheier, CCC's Coaching and Athlete Coordinator, depicted Tony as 'taking the reigns and providing some crucial leadership' during his presidency. Tony engineered a strategic plan that allowed the association to forge ahead with a progressive outlook rather than clinging to a past that was no longer feasible for CCC. Under Tony's leadership, programming was maintained as the number one priority, particularly for the National Ski Team. Administration took deeper cuts and more responsibility was placed on the volunteer sector in order to maintain programming. During his term as President, Tony realized that the survival of the association was very dependent on strong partnerships with other sport funding agencies. He worked tirelessly to enhance these relationships particularly with the Canadian Olympic Association (COA), the Canadian Olympic Development Association (CODA) and the Canadian Ski Association (CSA). Tony will continue his role on the

Executive Committee, as Past Chair, and his duties will be to continue to foster strong relationships with these associations.

We are truly appreciative of Tony's steady guiding and firm judgement over the past 20 years. His contribution has been immeasurable and he always 'got the job done well with great attention to detail'.

WELCOME TO THE NEW PRESIDENT LEOPOLD NADEAU

The incoming President of Cross Country Canada is Leopold Nadeau. Like Tony Daffern, Leopold has a long history of involvement in outdoor recreation and adventure both as a rock climber and expedition participant. Leopold was a member of the Quebec cross country ski team and a ski jumper as a Junior. He was also a participant in one of the first expeditions to cross Baffin Island on skis. He is a past Board member of Cross Country Quebec, a present Board member of the Pierre Harvey Training Centre and has been involved as a volunteer with SkiBec for over a decade where he is currently President. Leopold has a doctorate in Geology and has been a key race organizer in Quebec over the years and has served as Chief of Competition for a few National Championships, World Junior trial selections, Continental Cups and Quebec Cups. Leopold also has two children who are athletes at the Pierre Harvey Training Centre. Welcome Leopold!

FITNESS AND HEALTH ADVISORY FOR XC SKIERS

NEW EVIDENCE THAT STRENGTH TRAINING MAY BE MORE EFFECTIVE IF PERFORMED AT HIGH INTENSITY

By Eric Finstad, M.Sc. (Sport Sci.),
B.H.Sc. (Physiotherapy) candidate

Greetings. This article is my first of hopefully many Fitness and Health Advisory articles in Cross Connections. The water level has dropped a phenomenal amount in the last few hours since high tide. And it will go a lot further - actually 18 metres in total until the water level rises again! I see it all from a nice beach in a private cove in Fundy National Park to which we had to hike in a couple of hours. I should be a long way from thinking about strength training except for perhaps lifting heavy rocks to search for sea life or fossils below. But here I am writing a piece on high intensity strength training - something I learned more about summer when I visited Dr. Jan Hoff at the Norwegian University of Science and Technology in Trondheim, Norway. Since then, I have appraised some recent research articles by Dr. Hoff and his colleagues.

In one of their studies, they found that female XC skiers (with an average age of 18 years) who strength trained at high intensity improved their double poling performance significantly more than others who trained at a lower, more traditional intensity. The training was performed on a bolted-down seat equipped with pads restraining the legs, and with a cable pulley attached to a Universal-type weight apparatus. The seat was 2 metres away from the pulley apparatus, and the angle of the cable was ~ 25° from horizontal in order to maximize mechanical efficiency. Training was performed three days per week and consisted of three sets of six reps (of simulated double poling) with a load approximating the 6RM (meaning ~ 85% of the 1RM, i.e., 85% of the maximal weight one can lift one time only). The elbow angle had to have exceeded 90° in the follow-through in order for an acceptable repetition. When a skier successfully completed three sets of six reps, the load was increased by 1 kg the next session. After nine weeks, not only did the high intensity group significantly increase their strength over the control group, they lasted 100% longer on a maximal aerobic test using a unique double

poling ski ergometer. Therefore their increased strength did not compromise aerobic capacity, rather, their endurance increased as well! It is important to note that the training was done very specific to skiing technique and the skier must be prepared and motivated before performing such a maximal effort over a short time.

Previously, the authors studied male XC skiers and found similar increases in both strength and time to exhaustion on the ergometer. From the results of both studies, they postulated that the high intensity training resulted in an increased ability to work for a long time with high levels of lactate. It must be remembered that a proper and lengthy warmup be done before such a workout in order to

prevent injury. It also must be remembered that this type of training is not for everyone, for instance, for young teens, or for those without access to equipment that is correct and safe enough. Yet overall, the evidence is there to influence your decisions when planning your next strength training workout. I must go - time to move some rocks!

Further reading: Hoff J, Helgerud J, Wisloff U. Maximal strength training improves work economy in trained female cross-country skiers. *Medicine and Science in Sports & Exercise*. 1999;31(6):870-877.

For other references or for any correspondence, please write me at ericfinstad@hotmail.com.

2000-2001 Season Calendar

DATE	EVENT/LOCATION
November 23-26	Merrill Lynch Continental Cup, Silver Star, BC National Sprint Series Race #1
December 9-10	Continental Cup, Val Cartier, Quebec
December 16-17	Continental Cup, Val Cartier, Quebec National Championships 30/15 km
January 3-7	US Nationals, McCall, Idaho
January 11, 13-14	World Junior Trials, Canmore, AB Western Canadian Championships
January 10-14	World Cup, Salt Lake City (Soldier Hollow), Utah
January 27-28	US Continental Cup, Minneapolis, USA
January 30-February 4	World Junior Championships, Poland
February 3-4	Atlantic Canadian Championships Stephenville, NF
February 3-4	US Continental Cup, Marquette, Minneapolis
February 7-17	World Winter University Games, Zakopane, Poland
February 10-11	Canadian Birkebiener, Edmonton, AB National Long Distance Series Race #1
February 15-25	World Championships, Lahti, Finland
February 17-18	Keskinada Loppet and X Sprints National Long Distance Series Race # 2, National Sprint Series Race #2
February 24-25	Eastern Canadian Championships – Nakkertok Ski Club Gatineau/Ottawa
March 9-17	US Junior Champs, Marquette, Minneapolis
March 18-25	Canadian Championships, Val Cartier, QC Finale: National Sprint and Long Distance Series
March 30-April 7	US Spring Series, Idaho



Road Map to a World Championship Title

by Toni Scheier

This past year Cross Country Canada (CCC) redesigned their Competitor Development Model, a summary of the key steps a skier must take if they would like to develop into a top level international competitor. The document provides guidance on all of the important questions faced by young athletes and developing coaches, such as: When should I start interval training? What levels of competition are important to race at as a 16 year old? How many hours of training should I be doing at my age? and When should I start to specialize in the sport?

It is important to remember that the standards outlined in the Model are those that athletes who are on their way to international success need to meet. Not all athletes are able to achieve these standards. As well, the model provides a progression that assumes the athletes are introduced to the sport at around the age of 8 to 10-years. For late starters some adjustments are necessary.

There are some very important parts of the model where athletes often fall short, and on occasion go overboard. In ‘hours-of-training’ there is a stiff challenge for many athletes but it is important to note that these hours include hours of non ski-specific physical activity (for example, biking-to-school or other sports activities). As well, it is the total hours the top athletes are able to complete that allow them to reach the top. A second important challenge is the number of top quality racing opportunities—an area where we fall behind when compared with our competitors across the Atlantic. The latter challenge is an area CCC is addressing through the development of a strong Continental Cup circuit. The final key feature is the need for well-qualified coaches at all development levels. The model includes a description of the level of coaching certification necessary to effectively guide developing athletes.

As with any other roadmaps there are some detours, some situations where a slightly different path will help you arrive at the same destination. The detour may be work better for you given your personal situation but you will have to realize that it will take longer to get to your destination. One thing is certain – there are no shortcuts.

Start the millennium off on the right road!

CANADIAN ROAD MAP TO A WORLD CHAMPIONSHIP TITLE Version 1.2

Age	Type, length and # of races/year		Performance standards		Integration of education and work	Funding opportunities
	Winter	Off-season	Average skiing speed	Off-season (running times based on ski training focus)		
25 + :	WC: 10 N Am Cont Cup : 10 Other national : 10 Total: 25-40+ Length : 1 -75 km	Rollerski : 4-7 Running : 3-5 Other (aerobic): 0-2 Total: < =6 Duration: 15-90 min	Skating : m 2:40/km 10km+ f 2:50/km Classic : m 2:45/km 10km+ f 2:55/km	1000m : m 2:40-2:50 f 3:00-3:10 3000m: m 8:45-9:00 f 9:45-10:15 10k: m < 33 min f < 38 min push-ups : m 75 f 35	School : 1 or 2 correspondance courses Work : should have enough with funding opportunities	- Sport Canada carding - NST and/or division team support - provincial athlete funding programs - Petro Canada Scholarship Fund - race prize money - sponsorship and supplier support - Ski to School scholarship

Age	Type, length and # of races/year			Performance standards		Integration of education and work	Funding opportunities
	Winter	Off-season	Off-season (running times based on ski training focus)	Average skiing speed	Off-season (running times based on ski training focus)		
21-24 :	Euro Cont. Cup : 10 N Am Cont Cup: 10 Others : 10 Total: 25-40+ Length : 1-50 km	Rollerski : 4-7 Running : 3-5 Other (aerobic): 0-2 Total: <=6 Duration:15-90 min	1000m : m 2:45-2:55 f 3:05-3:15 3000m: m 9:00-9:15 f 10:15-10:45 10k: m < 33 min f < 38 min push-ups : m 75 f 35	Skating : m 2:45/km 10km+ f 2:55/km Classic : m 2:50/km 10km+ f 3:00/km		School : 1 or 2 correspondance courses Work : if needed, part time easy summer job or full time in spring only ** a balance as per below, will vary with each individual	- Sport Canada carding - NST and/or division team support - provincial athlete funding programs - Petro Canada Scholarship Fund - race prize money - sponsorship and supplier support - Ski to School scholarship
19-20 :	WJC : 3 Euro Cont Cup: 4 N Am Cont Cup : 10 Other national : 7 Other divisional : 7 Total: 20-25+ Length : 1-30 km	Roller ski : 4-7 Running : 3-5 Other (aerobic):0-2 Total:<=5 Duration:15-60 min	1000m : m 2:50-3:00 f 3:10-3:20 3000m: m 9:15-9:30 f 10:45-11:15 10k: m <34 min f < 39 min push-ups : m 60 f 30	Skating : m 2:50/km 10km+ f 3:00/km Classic : m 2:55/km 10km+ f 3:05/km		School : Reduced course load at a NTDC Work : if needed, part time easy and flexible summer job or full time in spring only	- Sport Canada carding - NST and/or division team support - provincial athlete funding programs - Petro Canada Scholarship fund - race prize money - sponsorship and supplier support - Ski to School sponsorship
17-18 :	Euro races : 4 N Am Cont Cup : 10 Other national : 7 Other divisional : 7 Total: 20-25+ Length : 1-30 km	Rollerski : 4-7 Running : 3-5 Other (aerobic):0-2 Duration:15min-1h	1000m : m 2 :55-3:05 f 3 :15-3:25 3000m : m 9:30-10:00 f 11:15-11:45 10k: m <35 min f <40 min push-ups : m 55 f 25	Skating : m 2:55/km 10km+ f 3:05/km Classic : m 3:00/km 10km+ f 3:10/km		School : full time but in sport-school program and at regional training facility Work : part time or flexible full time summer job if necessary	- NST support - regional and division team support - provincial athlete funding programs - supplier support - Ski to School sponsorship - sponsorship in goods - club financing activities
15-16 :	National events : 4-8 Divisional races : 6-10 Regional : 3-6 Length : 1-10 km	Rollerski : 3-4 Running : 3-4 Other (aerobic):0-2 Duration:15-30 min	1000m : m 3:10-3:25 f 3:30-3:45 3000m : m 10:00-10:30 f 11:45-12:15 push-ups : m 50 f 15	Skating : m 3:05/km 10km+ f 3:15/km Classic : m 3:10/km 10km+ f 3:20/km		School : full time but in sport-school program and regional training facility Work : part time or flexible full time summer job if necessary	- Provincial funding programs - regional or division team support - sponsorship in goods - club financing activities
13-14 :	Local national events : 2-3 Division champ : 5-7 Other divisional : 2-3 Regional : 2-3 Length : 500m-10km	Rollerski : 2-3 Running : 2-3 Other (aerobic):0-2 Duration:15-30 min	1000m : m 3:25-3:40 f 3:45-4:00 3000m : m 10:30-11:15 f 12:30-13:00	Skating : m 3:15/km 10km+ f 3:25/km Classic : m 3:20/km 10km+ f 3:30/km		School : full time but in sport-school program if available Work : part time or flexible full time summer job if necessary	- regional or division team support - sponsorship in goods - club financing activities

*** Note a balance must be achieved between school/work and training. All the training must get done and standards met with sufficient rest, if an athlete is to be successful in skiing.

CANADIAN ROAD MAP TO A WORLD CHAMPIONSHIP TITLE Version 1.2

Age / Goal	Yearly training volume *	Technique emphasis	Cardio vascular emphasis	Strength emphasis	FOCUS AND COMMITMENT
25 / Goal : - NST-A - 96% + at WC - 95% IPL coach level : 4-5	M : 750-900* F : 650-800*	- work on personal weaknesses - maintain acquisitions - stay on cutting edge of technical evolution	- high anaerobic threshold - high lactate tolerance - Inc. time at Vo2max	- high specific muscular stamina (resistance) - maintain acquisitions	- personal weakness awareness and response - major event focus and specific preparation - good medical and para-medical support to absorb heavy training load - maintain a healthy and balanced perspective relating to their ski career and life goals
21-24 / Goal : - NST-B - 92% + at WC - 91.5% IPL coach level : 4-5	M : 650-750* F : 550-650*	- work on personal weaknesses - maintain acquisitions - stay on cutting edge of technical evolution	- high anaerobic threshold - high anaerobic capacity - Inc. time at Vo2max	-power -high lactate tolerance -maintain acquisitions	- recognition and acceptance of challenges - keep motivated from opportunity to overcome challenges - develop autonomy in training plan design - good medical and para-medical support to absorb heavy training load - need to enjoy the “professional” skiing life (traveling, meeting new people, etc) - develop media awareness and skills
19-20 / Goal : - NST-junior - 95% + at WJC - 93% + at SNC - 89% IPL coach level : 4	M : 550-650* F : 500-550*	- adaptability to variety of snow and track conditions - work on personal weaknesses - optimal technique efficiency vs fatigue	- aerobic power (Vo2max) - anaerobic power - endurance capacity - adapt to speciality (if applicable)	- power - max strength - endurance capacity - focus on upper body strength	- 24 h athlete concept application - re-evaluate the level of commitment for the next few years based on results, progression, motivation - short to medium term financial planning - medical and para-medical support - First glacier exposure for off-season skiing and altitude training experience
17-18 / Goal : - NTDC - WJC participation - 97% at JNC - 86% IPL coach level : 3	M : 450-550* F : 400-500*	- optimal use of techniques vs inclination variations - develop technique efficiency vs fatigue	- aerobic power (Vo2max) - develop anaerobic capacity	- specific endurance training - power training using body weight on and off skis	- year round training and monitoring (tests) - get European exposure - evaluate level of commitment for next few years based on results, progression, motivation - short and mid-term planning of ski career vs school - develop personal awareness of training needs - investigate value in specialization - introduce systematic medical and para-medical support

Age / Goal	Weekly training volume *	Technique emphasis	Cardio vascular emphasis	Strength emphasis	FOCUS AND COMMITMENT
15-16 / Goal - Division team - top 3 at Junior Nationals - 80+% on IPL coach level : 2	M: 400-450* F: 350-400*	- refine technique adaptation to snow conditions - adaptability of technique to terrain and track conditions - focus on performance related technique adaptation (tempo, snap, range)	- start of high intensity aerobic intervals - start more systematic high intensity aerobic training in the off-season - speed training	- upper body endurance training - general strength and core strength using body weight	- emphasize team training for motivation - start getting major travelling experience (Europe if possible) - Continental Cup racing and quality race participation throughout season - start increasing training knowledge and get involved with planning - start closer training and medical monitoring - learn good training habits/ begin systematic training - start targeting efforts on specific goals
13-14 / Goal : - regional team - division race medals coach level : 2	M: 350-400* F: 300-350*	- refinement of techniques - improve balance, co-ordination, agility - begin to learn to adapt technique to terrain - develop downhill abilities	- aerobic training dominates - use mainly races as intensity workouts - general speed development with short fun workouts	- upper body strength using body weight in circuit training and core strength - endurance strength training (cycling, skate without poles, double pole)	- reinforce team spirit and group training - learn proper technique for both styles - improve waxing knowledge and abilities - start keeping a training record - evaluate impact of growing commitment to skiing in the near future - First participation at the Junior Nationals - Introduce process oriented goal setting - quality technical skiing from first to last snow in all conditions
8-12 / Goal : - Jackrabbit or Racing Rabbit club member - regional race participation coach level : 1-2	- year round active sporting life - group sessions 1-2 x/week	- develop balance, co-ordination and agility - equal use of styles - copy older, better skiers - develop downhill abilities - practice a variety of sports demanding different skills	- general aerobic activities 3-4 x/week - occasional longer tours - endurance oriented - 4-6 low key races or time trials per season	- natural reinforcement through aerobic activities and using body weight	- have fun at skiing, first to last snow - learn to compete for fun - develop a good sport ethic - develop team social atmosphere - high quality technique instruction in both styles
8 and under : goal : Bunny Rabbit club member coach level : 1	- variety of activities on a regular basis and year round	- develop a wide variety of abilities through a variety of activities year round	- mainly aerobic alactic activities	- natural reinforcement through aerobic activities and using body weight	- implement the love of x-c skiing by ensuring proper equipment, waxing, choice of weather conditions and choice of trail, develop the “Joy of Skiing” - integrate lots of social activities and games in “training” sessions

: LEGEND : NCCP = National Coaching Certification Program; NST = National Ski Team; WC = World Cup or World Senior Championships; WJC = World Junior Championships; NTDC = National Training Development Centre; NSC = National Senior Championships; NJC = National Junior Championships; IPL = International Points List

University of Calgary Student receives 2000 Ski-to-School Scholarship Award

By Blanka Jelen

Sarah Daitch has aspirations to represent Canada in the Olympics as a cross-country skier. She also hopes to work for the United Nations. Based on her track record as a student and as a national level cross-country skier, one expects that Sarah just might meet those goals. Daitch's achievements in academics and sport have earned her the Cross Country Canada 2000 Ski-to-School Scholarship award.

The 19-year-old skier grew up in Fort Smith, NWT. A 7-year veteran of the NWT cross country ski team, Daitch has spent many long, dark hours training in harsh northern conditions; often alone. Her hard work began to pay off in 1998 when Daitch earned a berth onto the Canadian World Junior Championships team, at the young age of 16. She continued on to many top placings at Canadian Junior National events, and skiing as a junior, finished 10th in the 2000 Canadian Senior National Championships.

Remarkably, Daitch's commitment to sport has not compromised her academic achievements, as indicated by her top-of-the-class academic performance throughout her high school career. Nor has it compromised her willingness to help others. Daitch served as a tutor to several high-school classmates, including a mentally challenged teenager. Now, entering her second year of International Relations studies at

the University of Calgary, Daitch hopes to maintain her straight-A average, while training and racing as a member of the Canmore National Development Training Centre team. Her goal for the upcoming season is to ski consistently and represent Canada at the 2001 Nordic World Junior Championships in Poland.

"I feel happiest when my mind and body are in top condition", says Daitch. "I am sure that if I can be an organized and disciplined athlete, I can use that experience to help me succeed in school as well."

The thrill of competition, camaraderie and challenge of excelling in such a difficult sport are what keeps Daitch motivated to excel. Her desire to pursue her career goals helps maintain her academic focus on her mission to "become the best person [she] can be".

Queens and Carleton University Alumni who were high-level cross-country ski racers during the late 1970's initiated the Ski to School scholarship in 1997. It is presented each year to one promising athlete who combines excellence in academics and cross-country ski racing.

The 1999 recipient of the Ski-to-School Scholarship was Edmonton's Tara Whitten, who represented Canada at the World Junior Championships for the third consecutive year. The 1998 recipient of the Ski-to-School Scholarship was Nagano Olympian Guido Visser from Bromont, Quebec.

Award Winners 2000

At the 2000 Cross Country Canada Annual General Meeting volunteers were recognized for their outstanding contribution to our sport. These individuals are representative of the dedication and time commitment volunteers across the country give to our athletes.

Dave Rees Award

Winner: Gerry Rideout
Menihék Ski Club, Labrador City, Newfoundland

The 2000 recipient of the Dave Rees award has served as the President of his Ski club for over fifteen years and President of the Newfoundland Ski Division from 1995-1999. During this time the Menihék Ski Club built a clubhouse from local

timber, modified the trail system to accommodate both classic and free techniques and incorporated 'state of the art' trail grooming. The club has also hosted many events including an annual Loppet and several Provincial, National and International events. In 1986, Gerry initiated a Junior Development ski program for grade five students and the program has grown to its present size of approximately 100 students per year. He has been recognized in the past for his outstanding contribution as a volunteer having received *The Certificate of Merit* from the government of Canada during "Canada Celebration '88" and a "Commemorative Medal" for the 125th anniversary of the Confederation of Canada.

Gerry has had a significant impact on cross-country skiing because of his overwhelming enthusiasm for cross-country skiing at the club, regional and national level.

Editor's Note: Menihék Ski Club is the featured club in this edition of Cross Connections. Please see article on front page of this edition.

Volunteers of the Year

The Volunteer of the Year Award was awarded to two outstanding individuals this year—Reijo Puiras, Lappe Nordic Ski Club, Thunder Bay, Ontario and Al White, Mono Nordic Ski Club, Orangeville, Ontario

Al White became active in cross country skiing about ten years ago. He joined the Southern Ontario Division

(SOD) executive and became a qualified official. Five years ago he took on the role of Chairman of SOD, attained his Level Three Official certification and became a Technical Delegate. In addition, he also became the Cross Country Ontario (CCO) representative to the Ontario Ski Council where he is Vice-Chair. Al's professional computer expertise proved to be invaluable in his role as Chief of Timing for the Canadian Championships in 1993. In 1997 he was Chief of Timing for the Special Olympics, in 1999 he was Chief of Race for the Canadian Championships at Duntroon, and in 2000 was Chief of Race for the Eastern Canadians also held at

(continued on page 11)

Award Winners 2000

(continued from page 10)

Duntroon. He served as Technical Delegate at the Ontario Championships, the OUAA championships and the OFSAA championships (with 600 competitors)—all during 2000. His special combination of computing skills and extensive knowledge of race timing led him to create an elaborate race management program which is being used at all levels of races and has proven to be very reliable. The program is available free of charge to race organizers and is continuously updated as the sport changes. He is presently the President of Mono Nordic Ski Club, organizes a 10 km race for the local hospital and instructs a Jackrabbit program.

Reijo Puiras has a keen personal interest in cross country skiing and has been involved in our sport for many years. This former National Team athlete has a Scandinavian background that we all know has Nordic skiing engraved on it. Reijo built and maintains the ski trails and club at Lappe Nordic Ski Club in Thunder Bay, Ontario. He put in a tremendous amount of time and hard work to create a world class course for the Junior and Senior National Championships which were to be held at Lappe this past season. He spent many sleepless nights shoveling snow from the woods in order to keep the course for the Juniors. Reijo knows, as well as anyone involved in this sport, the one thing we have no control over is the weather. A very difficult decision was made to move the Senior Nationals to Canmore, Alberta. Reijo packed his bags and traveled to Canmore to provide his expertise and help in running the race on very short notice.

Firth Award

Winner: Pat Pearce
Bulkley Valley Ski Club,
Smithers, BC

Pat Pearce coaches the local racing team in Smithers, BC, and has brought the club skiers from participation at local races to competition at BC Cup level races. This progression has resulted in club skiers being named to the 13.C Development Squad or to the BC Ski Team. She is a great role model, and a dedicated coach for all her athletes and has given them the courage to 'reach for the stars'. She is constantly trying to improve her skills and never passes up the experience to learn more. She has encouraged her athletes to become involved in the local club by helping with the Jackrabbit Program and the annual snow camp for younger racers that she organizes. She has been involved with the expansion of the club and is always encouraging people to just "Come out and try it!". She flew all the way to Thunder Bay for the Junior Nationals this past season, even though she wasn't participating as a coach for the BC Team—she simply wanted to see everyone race after having worked so hard in helping her skiers achieve their goals. She is often at the various camps that are offered throughout the year, and is always encouraging everyone, especially the girls. Pat has been skiing for longer than three years, but during the past three years she has managed to become a certified Level 3 coach and continues to provide support to girls in attaining a high level of skiing.

Media Award

Winner: John Sims
Thunder Bay, Ontario

John Sims was the author of the National Championships' website and he did an outstanding job. He hopefully set an example of what can be done by race organizers to get their race information out to the skiing community. The website set a new standard for cross country ski racing and had complete coverage of the events and the participants. The hometown of each athlete was contacted in order to compile an athlete history. Newspaper contacts, photos and videos from the day's races were posted immediately and results appeared as they were being posted at the race site. Many other aspects of the Championships were captured on the site as well, including sponsors, contacts, and even race registration. When the Senior Nationals were moved to Canmore, Alberta, this Web Master continued his job and kept the page updated with information from the new race venue. John was on the road much of the time during the Canmore races but he continued, even then, to update the website and make it an excellent source of information for people across the country.

Sponsor of the Year Award

Winner: Madshus Skis
Product Manager: Reece
Rendall

Reece has spent over 15 years actively involved in the sport of Cross Country Skiing (XC). He works in the area of sales and has been a product representative in the skiing and cycling industry for 10 years. He was recently appointed product manager for Madshus skis in Canada, (prior to this he was the assistant). This past year Reece became part of the organizing team for the Keskinada Sprints. One of the goals of the event was to

stimulate greater public awareness of the sport. Reece developed a XC Demo Zone to run during the Sprint race. XC ski companies paid for space adjacent to the race course in order to set up their tents and demo their products for participants and the general public. This turned out to be a great success. Through Reece's efforts Madshus had a presence in the Demo Zone and was also a sponsor for the sprint race. Reece was able to secure, in addition to Madshus skis, Peltonen and Karhu skis, Exel poles, Salomon boots, and Oakley glasses as demo zone suppliers. Hundreds of people watching the sprints that day were able to try cross country skiing for the first time. Reece not only came with his own company's support but the industry's as well which has always been a challenge for organizers of events like the 'Keski'. As part of the Keskinada Sprint Organizing Committee he was always there for input and support!

In addition to his tremendous contribution to the Keskinada Sprints, Reece made it a high priority to travel to many National Ski Team (NST) camps and Cross Country Canada events. He attended all the National Sprint Series races, and both the Junior and Senior Nationals, in order to provide support to the NST, National Team Development Centre athletes and coaches skiing on Madshus Skis.

Reece has also developed a collector card of Beckie Scott in collaboration with Madshus and Trail Sport, as well as working with SportHill in order to encourage support for the NST.



**CROSS COUNTRY CANADA
RACE LICENCE APPLICATION FORM
2000-2001 SEASON**

1. Benefits of a Racing Licence:

Access to quality events organized by certified and trained officials; access to highest level of competitive skiing in your Division and in Canada; issues of SkiTrax Magazine (distribution will start upon registration). As a licence holder you will be assigned a better starting position than skiers not holding a CCC licence. You will be listed on the Canada Points List (CPL). The CPL is a ranking of all participants, enabling you to compare your performance against the top skiers in your age group. You can use your CCC racing licence to compete in sanctioned Biathlon events. It is not necessary to purchase two licences

2. Age Categories (CCC Rules and Regulations:

There are five major categories for which racing licences are issued. In certain events Senior and Masters' categories may be further divided into smaller age categories.

Juvenile:	Boys/Girls born in 1985 or after	Junior:	Boys/Girls born in 1983-84
Junior:	Men/Women born in 1981-82	Senior:	Men/Women born in or between 1971-80
Masters:	Men/Women born in or before 1970		

3. Complete and return to: Cross Country Canada, 1995 Olympic Way, Suite 100, Canmore, Alberta, T1W 2T6 (Fax: 403-678-3644).

Please read and ensure that you have the signature of your Club Signing Officer before returning your application form. Remember to include the fee of \$35.00 for Juniors or \$40.00 for Seniors and, in addition, for donations exceeding \$15.00 you will receive a tax receipt along with your racing licence. Please make cheque payable to **Cross Country Canada**. Your donation would be gratefully appreciated.

4. Declaration: For valuable consideration and in consideration of Cross Country Canada (referred to as "CCC") enabling the undersigned competitor to compete (according to CCC rules and regulations in force from time to time) in ski events which may be fully authorized and sanctioned by CCC, the under-mentioned competitor and his/her duly authorized legal guardian (if applicable) hereby waives and agrees irrevocably not to make or bring any claim, cause of action or legal proceeding whatsoever description which the undersigned competitor and/or member clubs, agents, employees and representatives and any ski area in which the competitor may be training or competing and each of such parties with respect to any default, injury or other mishap suffered or incurred by the undersigned competitor while training for or competing in any ski event in which CCC may be involved.

As per **FIS Rules**, as a requirement for licence holders, I hereby agree to participate in and be subject to the CCC Doping Control Program (which includes no-notice testing) for the duration of the licence period. I will provide a urine or blood sample, as required, within the specified timeframe. I am aware of the penalties that will be imposed in the event of my testing positive for drug usage/doping and I understand that refusal to undergo doping control will result in a suspension from competition as per CCC rules. For clarification of anti-doping rules and regulations, read CCC's Anti-Doping Policy or contact CCC at (403) 678-6791.

When completing your application form, please ensure all information is printed clearly or typed, your form is signed by an authorized club Executive member and make a copy as proof of application for your records. You must be a member of a club registered with CCC.

Skier Name: _____ Date of Birth: (Year) __ (Month) ____ (Day) ____ 99-2000 Race Licence #: _____

Male: ____ Female: ____ Address: _____ City: _____

Province: _____ Postal Code: _____ Telephone #: () _____ Club: _____

Division: _____ Former Jackrabbit: Yes No Coach(es) _____ Level: _____

Coach Signature: _____ NCCP #: _____

Junior Athletes (20 and under) must have their application signed by a Level 1 (minimum) Certified Coach)

Signature of Club Official: _____

Athlete's Signature: _____

Signature of Authorized Legal Guardian if Athletes is under 18: _____

PAYMENT: Racing Licence (\$35 –Junior/ \$40 –Senior) \$ _____

ONTARIO SKIERS ADD \$30.00 \$ _____
(provincial registration fee)

My Donation to the National Ski Team* \$ _____

TOTAL: \$ _____

Visa/MasterCard: _____ Exp. Date: _____ Signature: _____

* Tax receipts will be issued for all donations of \$15 or more.