



Training during the summer will hopefully enable Beckie Scott to reach the podium in Torino

Canadian Sport Centre
Calgary

Summer Training Winter Results

The grass is green, rivers are flowing, and there's no snow on the ground, but if you're a winter athlete, the time to train for Olympic glory in 2006 is *right now*

Story by KAREN CLARK LE POOLE

"SUMMER TRAINING IS COMPLETELY integral to how I perform in Torino," says Olympic champion Beckie Scott. "So much fitness is required in cross-country [skiing], and the peaking phase can be short. It takes a long time to build the necessary speed, endurance, and capacity." Dave Wood, head coach of Cross Country Canada, says that without crucial summer training, you might as well stay home. "Athletes have to put in a lot of hard work now to carry them through the racing season. In an endurance sport, athletes do the same motions thousands of times. In the summer, we work on the result-

ing muscle imbalances and focus on improving absolute strength."

According to Matt Jordan, strength and conditioning consultant for the Canadian Sport Centre Calgary (CSCC), the gains made in strength and physiology are done now: "We use higher volumes of training in the summer and put a greater emphasis on general physical abilities and foundational performance qualities." Jordan uses the example of the speed skater that needs bigger, stronger legs. However, training for this kind of power conflicts with sport performance as it causes a negative interaction with speed and technique.

"We train these foundational qualities now because it causes fatigue and decreased speed," says Jordan, president of Jordan Strength Consulting, "then athletes can reap the benefits of these foundational qualities in race season."



ABOVE: Jeremy Wotherspoon will be working on his skating technique over the summer LEFT: Canada's cross-country team, including Sara Renner, will be snow training this summer

Summer training is also a chance for athletes to switch their focus from performance to skill development, fitness training, and mental stamina. "This time of the year is the most important for training," says Olympic and world hockey champion Hayley Wickenheiser. "During the season we play the game, focus on performance and continually break down our bodies. Now we can focus on our weaknesses and getting better." Wickenheiser says her training isn't too fancy: "Just old-fashioned hard work. You need everything in hockey—speed, power, endurance, agility, strength, and a good aerobic power base."

Canada's national women's hockey team is doing the full range of training this summer, including three or four workouts a week on the ice, three- to six-hour bike rides once a week, obstacle courses that focus on full body movements, and off-balance weight lifting. "In hockey you're always off balance, and it's twice as hard to do anything," says Wickenheiser. "We work on being strong and moving weight through a motion. We'll do a squat and have someone push or pull on you so that you can translate that off-balance strength onto the ice."

Dr. David Smith, director of sport science for the CSCC, says it's critical for winter ath-

letes to lay down a foundation of work now to develop general athletic ability: "Without this fundamental training, a limited volume of sport-specific training would ensue. We have recognized that peak performance in the competitive season is significantly affected by the work done during the summer months."

For Olympic medallist and four-time world sprint champion Jeremy Wotherspoon, every training period is vital: "We always have different physiological priorities," says the speed skater. "It's critical you get what you need during every cycle of training to prepare for the next one. There's a domino effect—every step translates to being able to skate faster later in the year." Wotherspoon is constantly working on skating technique, but the summer is about base work: "We're working on sub-aerobic, aerobic, and anaerobic capacity, making my entire body work efficiently in different heart-rate zones."

Sara Renner, a world medallist in cross-country, says her summer training respects the specific snow and course conditions she expects in 2006. "It's high-altitude and very demanding terrain in Torino. Because of the difficulty it will keep us honest in our summer training."

Canada's cross-country team is travelling this summer seeking snow. Their itinerary includes glacier skiing in Kananaskis, three weeks in New Zealand, and a trip to California for high-altitude training. "It's important they don't lose touch with their skis over the summer," says Wood. "It's recognized that the number of runs or volume of technical executions in the summer is critical to performance in the winter," says Smith. "Therefore, access to sport-specific venues in mid-summer is critical for today's world-class athletes." Canada's cross-country team was the first team in the world to use speed suits for racing. "We look at all the little details to make a complete picture," says Renner. "We use altitude rooms that take oxygen out of the air to simulate altitude; we use roller skis in the summer; we work on our overall conditioning; we run on the treadmill; we use protein drinks, sport drinks, and vitamins; and we allow time for recovery. To be the best in the world, you can't be missing a single element."

CSCC athletes are not resting on their laurels this summer—the countdown to Torino is on.

"The training is innovative, sophisticated, and very demanding," says Jordan. "It ultimately results in better performance—winning medals in Torino is the focus." "You've got to commit to logging and grinding out the hours now," says Scott. "It's a tremendous investment physically and mentally so you can ride it out in the tough times to come." 