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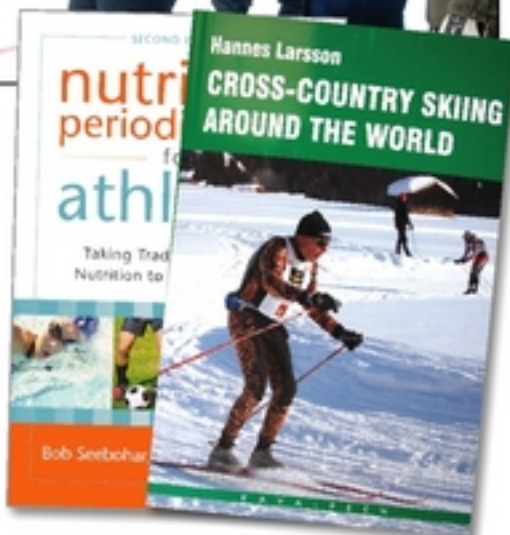
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FIRST TRACKS

BY RON BERGIN

THE STATE OF THE SPORT

One of the most frequent questions I get from skiers, resort owners and the general public is, "Just how many cross country skiers are there in the country?" Close behind that is, "How is the sport doing?"

I've struggled to provide definitive answers to both.

In an effort to come up with a better response the next time these questions are voiced, I decided to sit down and take a look at some of the available research.

Analyzing the data is both complex and potentially contradicting and confusing, and in part depends on the source as to its interpretation. Admittedly this is a cursory, top-line take on the subject. There are a handful of reputable sources of information, each drawing from a different data set or utilizing a different methodology. The Snowsports Industry Association (SIA) is the national trade association that represents manufacturers of alpine, Nordic, and snowboard equipment, clothing and accessories. SIA has its finger on the pulse of what is happening at the wholesale and retail level and reports regularly about equipment sales at both specialty and chain outdoor sport stores. Working with Leisure Trends Group, SIA has also invested in more traditional market research to better ascertain participation levels in the specific sports.

The National Sporting Goods Association (NSGA) has also conducted participation level research. This trade group is similar to SIA, but takes a broader look

at all types of equipment, not just snowsports.

Next is the Outdoor Industry Association (OIA), a trade association for companies in the active outdoor recreation business. OIA works with more than 4,000 manufacturers, distributors, suppliers, sales representatives and retailers in the outdoor industry. It also works in conjunction with its sister organization, the Outdoor Foundation, to promote greater participation in outdoor activities of all kinds. OIA has made a concerted effort to research outdoor participation on a broad level via a series of online surveys.

Finally there's the Cross Country Ski Areas Association (CCSAA), a trade association with membership primarily comprised of commercial, non-profit and government-agency Nordic ski centers and resorts around the U.S. and Canada. This group has direct access to information regarding how many actual skiers are out there on the trails from day to day. CCSAA's scope and research data is limited, however, to only its membership (about two-thirds of all Nordic properties nationwide).

The ski equipment manufacturers themselves are an excellent source of "real time" state-of-the-sport data. Peter Ashley, VP Nordic for Fischer Skis, recently announced that reorders for 2011-2012 were up 20 percent. This is a significant and impressive up tick. It means retailers are already moving through inventory and their confidence is running high. The most obvious reason is that most of the country experienced a good winter last year. Almost every manufacturer I've ever spoken with repeats the same mantra, "If there's

One can also look at event participation, a valid data point, which has been stable to growing across the country. The American Birkebeiner, which had hit a plateau and for many years, struggled to reach the 7,000 participant mark, in the past couple of years has exploded to 8,000, then 9,000, and is now flirting with 10,000 participants... the average age of Birkebeiner participants has actually come down by a couple of years to 39 (from 42), which also speaks well to the health of the sport.

snow, the sport will grow and expand." This seems to be happening now, but wasn't exactly the case a couple of years ago. Coming out of a series of bad winters, retailers had significant inventory from previous seasons and, despite seeing some consistently good snow around the country and though initial orders were good, reorders were flat. It apparently took a couple of seasons for shops to blow through that inventory and it now looks like they are into a more stable sell-through cycle.

I have a problem, however, simply using equipment sales to quantify participation levels in the sport. While it may be an indicator of the strength of the business side of the sport, does it really tell us how many people are skiing? I'm not so sure. Perhaps there is a factor that can be applied to major purchases that will deliver an estimate of total participation. Or,

perhaps research can ascertain what the purchasing cycle is for the average skier and extrapolate from the total sales over a number of years in that cycle and arrive at participation levels. Let's face it, hardly anyone buys new skis, boots and bindings every year, even the most die-hard racer type. The most passionate enthusiasts will probably only turn over their gear for the latest and greatest every three to five years. And, there are those who will use the same gear for a decade, or longer.

Finally, there's the definition of "what is a cross country skier?" Some research methodology will classify a person who goes out on skis once in a season as a cross country skier. For me, this definition falls flat. Really, if I ventured onto a golf course only once a year, I certainly wouldn't consider myself a golfer. And while there is a wide range of participation levels, from those who ski every day to those who might get out once every couple

of weeks or less, the baseline for computing participation levels needs to be more realistic.

Among the intangibles of developing a complete picture of nationwide skier participation is a significant segment of the skiing population that at least in my estimation, is not going to show up on the radar of any the above cited trade associations. I use my neighbors down the road as an example. I have never seen this couple at any of the local trails in our general area. But I do see their tracks in the woods on the old logging roads, on the lake or back in the bogs. And I would wager that they've not made a new equipment purchase in a long time. In my opinion, however, they are definitely cross country skiers. But they, and who knows how many others like them, are never going to tally in any of the research studies conducted.

How to accumulate sufficient and valid data to arrive at a legitimate

conclusion is without question a challenge.

All of this is a long, round about way to say that it's a mighty complicated and nebulous challenge to attempt to come up with simple answers to the questions I've tasked myself with answering.

It's probably easier to speak to "how the sport is doing" first. From a simply subjective perspective, I would pose that sport is indeed doing well, or at least better than it has in almost a decade. Obviously my point of view is a bit skewed: I live in a ski town, I hang out with skiers, I frequent skier-friendly places of business, and I see lots of skiers at the various trailheads and on the trails. Someone not traveling in the same circles might draw a different conclusion.

As previously alluded, equipment sales have rebounded over the past couple of years. SIA research through December 2010 showed \$45 million

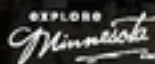
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NORDIC FAMILY

BY HEIDI HILL

TAKING A SHOT AT PAINTBALL BIATHLON

It was a single-digit Saturday in January when we headed out to meet four other families for a carpool caravan to the Mountain Top-Tippmann Paintball Biathlon. While parents discussed the best route for the two-hour drive to Chittenden, Vermont, the kids ran around the parking lot in their puffy parkas unfazed by the cold temperatures. Making the trip were nine children, a mix of boys and girls ranging from preschool to fifth grade. Two of the boys were primarily alpine skiers, but the combination of shooting and racing enticed them. We came out of curiosity and encouragement from a family who participated last year and had a blast.

We knew we were getting close to the venue when we came upon a stream of cars traveling the same back-roads route. The cars proceeded uphill to a nearly packed parking lot. We had heard that kids from all over New England attended this event and it looked as if cold temperatures were not a deterrent.

This was the sixth annual paintball biathlon, so the race staff was prepared with orderly parking and efficient registration areas. The event has become so popular that it runs over the weekend. The following day, high school skiers and adults would compete.

We headed inside the lodge, which housed a gift shop and a small grill. On went the neck warmers and balaclavas, and parents purchased hand and foot warmers for themselves and their kids. Then we headed to target practice.

My husband and I skied with our kids to target practice. I was glad to have my skis along for this reason. Skiing warmed my feet and offered an opportunity to ski with the girls on what was otherwise their ski day. We climbed gradually to reach the range, which was located in the middle of the 1-km loop.

The range consisted of several sites, where skiers stood behind a wood railing and aimed at five paper-plate targets, which were mounted on plywood. Volunteers manned the sites and waved skiers over as sites became available. During practice, the helpers offered assistance steadying the rifle, looking through the sight, and shooting — instruction that

was especially helpful to first-time participants. For novice shooters, the biggest challenge was utilizing the rifle's sight. That gizmo on top of the rifle appeared as a hindrance to aiming rather than a helpful and necessary part of the gun.

The atmosphere at the range was fun-filled and easy going, as the ammunition coming out of the guns was a small, gelatin-filled ball that was non-toxic and biodegradable. From my perspective as a parent/spectator, target practice was my favorite part of the event. I loved seeing the concentration on the kids' faces as well as their delight when the green paintball exploded against the paper-plate target. The lollipopers did not shoot during the race, so this was an opportunity to see my preschooler's introduction to paintball biathlon. Since my first-grader only had one visit to the range in her 1-km race, this was the chance to see her shoot as well. For longer races, parents could potentially watch some shooting and still see the finish of the race. Though you could not ski on the race trail, there was a path from the range to the lodge and finish area.

Target practice ran for an hour before the races, allowing plenty of time for skiers to flow in and out of the area. Just before noon, the lollipopers began their 1/2-km race. This was the only mass start, given that this age probably couldn't stand watching someone else start before them. Moments before the race, my lollipop had cold feet literally and figuratively. Daddy reminded her of the sweet prize at the finish and she made the start line in the nick of time. The kids' eyes lit up when they saw the lollipops at the finish. A buddy from our town also raced and when the kids finished



they headed inside and licked those lollipops by the woodstove.

Races continued throughout the afternoon with two-grade groupings for grades one through eight. Boys and girls raced separately with individual starts at 15-second intervals. Since

The shooting added another element to the fun of racing.

In the afternoon, ribbons and raffle prizes were presented. The informal ceremonies were staggered so that the kids who raced earlier did not have to stay late into the afternoon.

All finishers were announced and ribbons were handed out. Most of our gang got hats from the raffle, which immediately replaced the hat on their head.

When our local gang returned to school on Monday, they wore their paintball biathlon shirts.

It may be the only T-shirt with a gun on it that you can wear to school. The front depicts a skier standing and aiming a rifle and the back features a big splotch of paint. The kids had a lot of pride wearing those shirts and answering questions

we opted for race-day registration, my first-grade skier was at the back of the line of girls, which made her cold and anxious. Once she got skiing, she was fine and zippy. The announcer commented on her smooth, classic stride. She was in the minority—classic skiing at a biathlon, — but ended up with one of the fastest ski times in her age group, placing second behind a girl whose shooting was superior. For each target hit, a skier had 10 seconds deducted from their time. There were no penalties for misses, however. Each age group had additional visits to the range with each loop skied, with the exception of the 7/8 group. This group skied three 1-km loops with three visits to the range (like the 5/6 group), but had an alternate start route to increase their overall distance.

All the while, music was broadcast over the speakers along with finisher's names. My first-grader spent most of the day skiing back and forth near the finish watching the older skiers head around for another lap or to the finish. With friends in so many different age groups, there was a lot of cheering for each other and added interest in the races when you knew a participant. Upon finishing, kids would talk to their buddies about how many hits they got.

The Mountain Top Inn & Resort has been the host site for this event, which is supported by Toko and Tippmann, provider of the Tippmann 98 Custom Paintball guns. Event collaborators include the New England Nordic Ski Association (NENSA), the U.S. Biathlon Association, and the Mountain Top Nordic Ski Club.



about the event from their classmates. You can bet that they will be returning next year. **CCS**

Heidi Hill is the author of "Fit Family: The Infant, Toddler, and Preschool Years" (Vitesse Press, 2008). She lives with her husband, Tom Thurston, and two daughters, ages four and six, in Waterbury, Vermont. Their family enjoys skiing on the trails at Trapp Family Lodge.

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TECHNIQUE & TRAINING

BY STEVE HINDMAN

KEEP YOUR
MOJO WORKING
OFF TRAIL SKIING REQUIRES
TECHNIQUE TOO

Groomed trails are awesome, but there's a great white world worth checking out just beyond the corduroyed path. Why not break out of your rut this season and explore it? When you do, or if you've already discovered the joys of sliding wherever and whenever it's white, don't leave your technique behind on the set track.

Deeper snow can limit your glide and uneven terrain may challenge your balance when you venture off the groomed trail, but there's no need to stomp through the bushes like one of those snowshoers, for heaven's sake. Tall, supportive boots, wider skis, bigger baskets and a little experience will ease your balance issues. Add in a few technical tweaks for deeper snow and uneven terrain and you can ski instead of walk when off trail until the snow gets too deep or too thick.

On or off trail, technique helps you go farther with less effort, and that makes skiing more fun. To make your off-trail ski tours more fun and efficient, keep your mojo working from stride to stride. In other words, flow from ski to ski and let gravity and momentum do as much work as possible.

One Ski/Two Ski

Being a member of the Oneskis, that famous Slavic family known for their grace and glide, is always preferable for efficient technique, but you may need to ski on both skis sometimes for balance and flotation when you're off trail. This is a balancing act (pun intended). On one hand, you

want to avoid boldly striding out and transferring 100 percent of your weight onto the new ski only to have it plunge into the snow, sending you head first into the deep. When conditions favor or even require keeping some weight on both skis, keep your mojo flowing forward toward the next ski by shortening your stride and moving onto a flexed ankle as you stride onto the next ski. (photo 1).

Keep moving forward onto each ski and experiment with what happens when you aggressively move completely from one ski to the next. Does your glide increase? Do you plunge headfirst into the snow? Does your grip fail? Does your grip improve?

Note what happens when stay between your skis. Does your glide die? Does your glide improve because now you're floating higher in the snowpack? Does your ski slip? Feel your way into this new type of skiing.

Falling Forward

Whether you're on one ski or both, you can still use gravity to do a lot of the work for you. Let that pack full of hot cocoa, yummy cookies, and extra clothes help you instead of straightening up and skiing like a goose-stepping soldier marching off to field maneuvers. You may need to use less forward lean (from your ankles) in un-groomed snow, but keep as much as you can and use the extra weight of your pack to help power the falling-forward motion that starts when you push your front knee forward and over your ankle. Catch this added falling forward momentum on the next ski and let gravity give you a little free ride.

Ankle Flex

Ungroomed snow may slow or stop your rear ski from moving forward and can force you to lift it as you swing



Photo 1: Moving forward with some weight on rear ski.

Photos by Susan Hindman



Photo 2: Keep moving forward by pushing your front knee forward as your front ankle flexes for the pump that precedes your push-off.



Photo 3: Ankle, knee, hip extend as the body uncoils after the push-off to lighten the ski and float the skier forward.

it forward. In either case, the key to keeping your mojo working is to keep each stride short enough that you stride onto a flexed ankle as you move forward onto each ski. A flexed ankle is like an open door that allows your momentum (and the rest of your body) to pass through onto the next ski. A straight or extended ankle is a closed door that blocks your passage onto the next ski.

A straight or extended ankle can also cause the upper body to break at the waist when the ski and leg are stopped so suddenly and effectively. This pushes the hips back and down and forces you to stand back up before you can move to the next ski. To keep the door open and your hips moving forward, shorten your stride and sneak from ski to ski, flowing from one ski to the next instead of trying too hard to make a large stride forward.

The Pump

A quick and distinct down/up motion of your front knee as your kick begins improves grip, if the snow is firm enough to allow the ski beneath your foot to flatten and grip the snow as pressure increases as you extend after the pump. This doesn't work

as well in unpacked snow since the snow is likely to compress instead of providing a solid base to flatten your camber against. To adapt this pumping motion to the wild, emphasize the forward collapse of your knee to help you sneak forward onto the next ski (photo 2).

This is a good focus on firm track as well, since it moves you forward as you coil for the next push-off. By the time you do extend your ankle, knee and hip after the collapse, your push-off will move you forward instead of just up. After sneaking forward with your knee, adjust the speed and intensity of your push-off to match the firmness of the snow.

In most conditions you will need a softer flexing ski to get your grip wax or waxless pattern compressed into the snow for grip. A waxless ski is often the best choice, unless it is really cold, since it is hard to wax for grip in off-track conditions without running into icing or slipping problems. One reason is changing snow conditions as you tour through different elevations, exposures, and temperatures. Another challenge is that softer waxes that are prone to icing are needed when you generate less "kick pressure" in soft snows. Icing underfoot is exacerbated in deeper snow since the middle of the ski is always in the snow even when un-weighted. To avoid these mechanical problems of grip and

glide, find a waxless ski designed for off-trail use that matches your weight. Prep it with the right glide wax for the day, treat the pattern to prevent icing, and then focus on your ski technique to enhance grip and glide, instead of fussing with your wax or those two

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On the Discovery Trail: *The First Skiers in North America*

By Ron Watters

It was more than a little nerve-wracking. Dave Brann shuffled his papers and looked out at the group that had assembled to hear his talk at the International Ski History Congress.

The congress was being held in Park City, Utah, less than a month before the start of 2002 Winter Olympics. Park City was aflutter with last-minute preparations. The Alpine and snowboarding events were being held at Park City's Mountain Resort. Not far to the south at Soldier Hollow, groomers were busy readying tracks for the cross country ski events. Brann's talk at the History Congress was taking place in an atmosphere of hopeful optimism but also of uneasiness and jitters that accompany the beginning of the world's preeminent winter athletic event.

Brann was dealing with his own jitters. In the room, sitting before him were the "gurus of ski history," the most knowledgeable ski historians from the U.S. and overseas. Even worse, he was about to commit a blasphemy. He was about

*Above: Siberian (promyshlenniki) hunters on their short skis.
Illustration from Panorama of Nations published in 1892.*