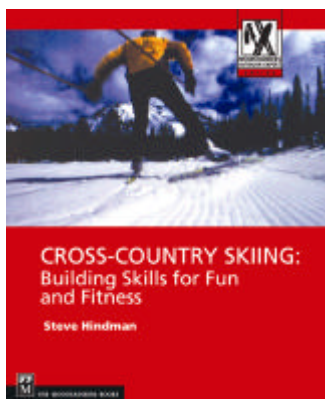




THE MOUNTAINEERS BOOKS



Cross-Country Skiing How-To Guide From a long-time PSIA certified instructor

- Technique demonstrated in step-by-step photos
- Special learning activities reinforce instruction
- Sidebars for trouble-shooting common problems and matching technique to terrain and snow conditions
- Tips for engaging the whole family

Whether your goal is to share outdoor adventure with your family, race competitively, or just get out of the gym this winter, cross-country skiing provides an opportunity to explore, keep fit, and discover freedom in the backcountry. The sport is ideal playtime and exercise for all ages; it is unrivalled in overall conditioning yet fun and easy on the body. To help skiers and their children get the most out of cross-country skiing, Steve Hindman, expert instructor and author of the study guide for the Professional Ski Instructors of America (PSIA) certification exam, offers **CROSS-COUNTRY SKIING: Building Skills for Fun and Fitness** (The Mountaineers Books, October 2005; \$19.95 trade paperback original). Here he shares the same techniques he teaches on the snow, whether you're setting out for a city park, looking for family fun at a groomed ski area, or heading into the backcountry to set your own track.

A Comprehensive Guide

CROSS COUNTRY SKIING covers equipment and accessories, waxing for grip and glide, training and conditioning, snow camping, route finding, and avalanche awareness. It takes you from how to fall (and how to get up again), through the classic and skate skiing basics (including stance, poling principles, and downhill tactics), to effective racing technique. It also takes up more advanced variations of the sport—freeheel, telemark, and ski mountaineering.

Learning and Training Activities for the Slopes and Dry-Land

Hindman breaks down skating and classical skiing techniques into fun learning activities that help to increase stamina and master the fundamentals of cross-country skiing. The Charlie Chaplain Drill, for example, teaches the basics of forward skating movement, and to achieve good classical poling rhythm, Hindman suggests using sounds to experiment with the tempo of pole movement. **CROSS-COUNTRY SKIING** even details dry-land training activities that simulate cross-country skiing, developing footwork and endurance away from the snow.

Teaching Your Kids

Skiing as a family can be as much fun as going to the beach, walking in the park, or riding bikes together, says Hindman. When it snows, cross-country skis can transform your backyard into a playground right outside your door. Hindman not only shows how to buy equipment for your kids and train them in skiing fundamentals; he teaches how to get them truly excited about cross-country skiing. Games such as “Whistle Means Stop” and “Balloon Stomp” give children the skills necessary to become capable and safe skiers—meanwhile, they’re having the times of their lives!

About the Author

Steve Hindman is a PSIA registered instructor who teaches in the Pacific Northwest and was a member of the National Nordic Demo Team from 1992-2004. He is the instructional editor for *Cross-Country Skier* magazine and has written instructional and travel articles for *The Professional Skier*, *Backcountry Magazine*, *Ski Patrol Magazine*, and *Ski Trax*. Hindman is currently the manager of adult programs at the Ski and Snowboard School at Stevens Pass in Washington. He teaches throughout the Northwest at various cross-country and telemark ski camps and clinics.

EXCERPTS

Going Downhill on Cross-Country Skis

Many competent and downright excellent classic and skating skiers still struggle on the downhill, especially with turns. They are comfortable with speed, have excellent balance, and know how to move from ski to ski. So what’s missing? Essential to mastering downhills is learning to adjust your technique to different terrains. Steve Hindman, author of *Cross-Country Skiing: Building Skills for Fun and Fitness*, offers a few pointers on downhill maneuvers for all snow conditions.

Riding the Rails

- Even on downhills with good tracks you will sometimes feel like your skis are going to stray out of the tracks as you turn.
- To stay in control as you “ride the rails,” envision where you would go if you did blow out. To balance your weight over the outside ski and ensure that you stay in the tracks, turn at the waist and face your hips, chest, arms, and head in that direction as you roll your skis onto their edges, riding against the sides of the track.
- If you do come out, you will be balanced over the outside ski as it slides forward and sideways on edge. Step off this outside edge and continue to step turn through the corner to complete the turn.

On Fresh, Firm Snow

- When edged, narrow skis that lack sidecut may resist sideslipping and want to go straight. Avoid this problem by moving into the sideslip before you get to the turn.
- Lighten your skis by making an upward movement (extend at the ankles, knees, and waist). Then roll your ankles to lift the down hill edges slightly as you twist your feet to turn the skis sideways.
- With your skis slightly edged and sliding sideways as you enter the turn, you’ll be able to guide your skis by turning your feet and adjusting the edge as needed. Balance over your outside ski by bending sideways at the waist. Make sure your outside leg is flexed to avoid falling backward.

On Ice

- Don’t try to edge more to get a grip on ice—instead, keep your speed low and make small and rapid step turns.
- Avoid any move that forces you to rely on one ski or one edge.
- If you need to bring your skis sideways for additional speed control, use more of a sideslip than a turn, with your skis turned well across the trail but delicately tipped on edge.
- If you have to edge more, drive both hands downhill and across your skis on either side of your feet, with your chest facing directly downhill as much as possible as you bend both sideways and

forward at the waist. If you slide out of this position, stay collected over your feet with your skis below you. Press the sides of your feet and skis into the snow to stop.

- Practice falling and stopping on icy trails before you face an urgent need to do so or stay off hills when it is icy.

On Refreezing Snow

- Use many small step turns to negotiate the corners and move quickly from foot to foot as if running in place even when going straight. This will prevent your skis from getting stuck and force you to keep moving your core forward to stay over your feet.

On Grabby Snow

- To make parallel or wedge turns on lightweight gear in grabby snow, start your turn before you pick up too much speed.
- You come quickly to a stop when you fall in thick snow, so keep your speed down or know when and where to bail out. Sit down sooner rather than later.
- Practice step turns in advance by making hundreds of tiny, frenetic step turns back and forth as you go down a steeper groomed trail in decent snow conditions.

Quick Tips for Choosing Cross-Country Skiing Equipment

With the abundance of options available, choosing the right skiing equipment can be overwhelming. Sorting through the myriad of skis, boots, bindings, and poles is a challenge for beginners and experienced skiers alike. Steve Hindman, author of *Cross-Country Skiing: Building Skills for Fun and Fitness*, offers some tips for finding the equipment that matches your interests and skill level.

Light touring—equipment for casual outings in the park, on the golf course, on snow-covered roads, and on groomed trails.

- Don't be oversold—skis between 50 mm and 70 mm wide at the tip, a system boot, and binding will keep everything light and flexible so you can ski instead of plod. Avoid metal edges and adjustable poles.
- Choose widths in the middle of 50mm and 70mm spectrum for maximum versatility. If you expect to ski mostly at groomed areas, go narrower. If most of your days will be spent knocking around wherever you find snow, go wider.
- Avoid buying *backcountry* system boots and bindings—they are unneeded and add unnecessary weight.
- Find a boot that fits, and then buy a binding to match.
- Choose a pole that is comfortable and easy to use. Choose an elliptical basket sized for where you want to ski (bigger for more snow, smaller for less).

Track skiing—when light is right. Equipment for skiing on machine-groomed trails.

Classic Equipment—for the traditional diagonal stride

- Go with a lightweight track ski or a citizen-racing ski. These are less expensive, a little easier to ski on, and offer almost as much glide as high-end racing skis.
- Opt for system boots and bindings rather than three-pin boots and bindings.
- Choose either manual or step-in bindings according to your preference. Step-ins are convenient but manuals are lighter.
- Be careful when wearing stiffer plastic soles—they're slippery and dangerous in icy parking lots. Wearing them in rocky parking causes scratches, which will attract ice and snow to stick to the sole while skiing.
- For high-performance skiing, select low cut boots with an unrestricted forward flex.
- Don't feel obligated to buy pricey boots—less expensive boots (combi, pursuit, performance, or sport boots) are a great choice for the majority of classic skiers.

- Avoid soft, squishy boots. They are heavy and lack control on the trail.
- Put what extra money you can into light, stiff poles. Less expensive stiff poles tend to be heavy. Spend money on the pole shaft before paying for fancy handles and straps.

Skating Equipment—for moving over the snow with a motion similar to ice or roller-skating.

- Avoid buying cheap racing skis. The magic of skating is hard to feel on skis more than one or two notches below the best.
- Buy a basic waxing iron and a small selection of waxes. Wax your skis for glide every second or third day you ski.

Combi Equipment—can be used for both skating and traditional skiing.

- Avoid skis made for both skating and classic. They are not worth buying.
- Choose combi boots for extra support while classic skiing.
- Buy combi bindings if you want classic bindings that are more resistant to forward flex.

Backcountry Equipment—tools for cruising through the park or climbing a mountain. This is the broadest category of equipment. If you are new to skiing, be sure to rent before you buy to understand the wide variety of options available.

- Go with full metal edges if you make turns on icy slopes. Choose partial metal edges if you want extra security touring in icy conditions but do not go around seeking slopes to make turns on.
- Match the boot to the ski. A wider ski requires a higher, stiffer boot.
- Select boots that are at least ankle high, but don't over do it. The heaviest boots are needed only for traveling in extreme terrain and carrying heavy loads.
- Choose backcountry system bindings for all backcountry tasks short of ski mountaineering and steep telemark descents.
- Opt for plastic telemark boots and cable bindings for extreme terrain and ski mountaineering.
- Choose pole baskets large enough for the snow you expect to ski in. Size fixed-length poles to fit easily beneath your armpit.

Teaching Your Kid to Cross-Country Ski With Fun and Games: 10 Activities for Learning the Basics

Cross-country skiing as a family can be as much fun as going to the beach, walking in the park, or riding bikes together—it's also the perfect opportunity to share with your kids an appreciation for nature, adventure, and fitness. Teaching children to ski can be incredibly rewarding, but it requires patience and creativity. Games can help build the skills necessary for fun and safe skiing, while preventing boredom and frustration. To get you started, here are a few activity suggestions from Steve Hindman's *Cross-Country Skiing: Building Skills for Fun and Fitness*.

- Have kids race to a certain spot. When you blow the whistle, they must stop by a count of three. If they don't stop in time they must move back ten ski lengths.
- Tie lots of balloons to a long string attached to your waist and weave over the snow while the kids chase you and try to break the balloons by stomping on them with their skis.
- Have the kids take one ski off and race using the remaining ski, as if they are riding a scooter.
- Do the Cha-cha, 1-2, 1-2-3. Glide on the three. Do it as a group. Do it up hill, do it downhill, do it all around. Get rhythm.
- Ski like a cat. Curl the claws on all four paws (poles and skis) to grip the snow and spring forward.
- On the flats, have kids put their skis in the A (wedge) position and use their poles to push themselves around. Have them go right, then left, then straight. Do the same in a train of kids (skis of the child in back placed inside the wedge formed by the skis of the child in front). Make train sounds. Expect a crash.
- With their skis in the V (herringbone) position and edges turned, tell kids to walk and quack like a duck. Start on the flats, then waddle up a gentle hill.

- Downhill drill: Start out with the knees on skis, hands on tips for the first run. Do the next run up right with hands on knees. On the final run have kids try to bite their pole handles as they slide downhill.
- Red light, green light. Same as the game on foot. Leader holds poles baskets up for go, poles crossed means stop.
- Limbo! Place two ski poles upright in the snow. Suspend a third pole, held in place by the straps of the first two, between them. Be sure to attach the horizontal pole on the back or downhill side of the upright poles. Have kids ski through the arch clearing it by crouching forward or doing the limbo.

Tips and Suggested Learning Activities for Cross Country Skiing

Body Position

- Cup your body as if you were hugging a very large beach ball. This is the basic stance from which you flex and extend while skiing.
- Experiment with flexing only at the hip, only the knees, or only the ankles while striding. Then try flexing equally at the hip, knee and ankle.
- Keep arm and shoulders moving in your direction of travel, down the track. Avoid any excess rotation of the upper body.

Grip, Timing, and Push-off

- Concentrate on foot positioning and feel. Discover what grip feels like through the soles of your feet and what you have to do to create that feeling.
- To help your ski to grip, quickly increase the flex in your knee and ankle a split second before you begin to extend your leg for the kick. Mimic the down up motion you would use to spike the needle on a bathroom scale.
- *Leap* from ski to ski. Then back off and move from ski to ski with the same quick and concentrated effort but eliminate any unneeded up motion. Land on each ski as if you were stroking the fur of a large cat with your foot.

Poling

- Keep hands low as they swing forward to eliminate excess shoulder movement. Point your thumb down the track as your arms swings forward.
- Poling should start before the kick. To help syncopate your arm and leg, wait until your poling hand brushes the thigh of your weighted leg before swinging your other leg forward and beginning your kick.
- Use sound to help with pole timing. Listen for the pole basket to hit first, then for the ski to hit—Click (pole plant)...plop (ski onto track)...click...plop. See how long a delay you can create, noting the amount of delay that is most effective.

Relaxation

- Spend more time relaxed than you do applying power. Concentrate your exertions so you can snap and pop from ski to ski, then relax and glide when you arrive on each ski.
- After completing your poling, relax your arms and upper body to let gravity begin to swing your poles forward. Once your poles start forward from the pull of gravity, snap them forward with concentrated effort to recover your poles quickly.

Remember when doing any drill that accentuates or demonstrates an extreme position to return to the unexaggerated position or maneuver and integrate what you have learned.

¾All excerpts adapted from *Cross-Country Skiing: Building Skills for Fun and Fitness* by Steve Hindman (The Mountaineers Books, \$19.95)