Special Olympics Coaching Guide

SNOWSHOEING

Special Olympics

SNOWSHOEING COACHING GUIDE

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Special Olympics snowshoeing welcomes your ideas and comments for future revisions of this guide. We apologize, if, for any reason, an acknowledgement has been inadvertently omitted.

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SNOWSHOEING COACHING GUIDE

Planning a Snowshoeing Training and Competition Season

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Goals

Realistic yet challenging goals for each athlete are important to the motivation of the athlete both at training and during competition. Goals establish and drive the action of both training and competition plans. Sport confidence in athletes helps to make participation fun and is critical to the athlete's motivation. Please see the Principles of Coaching section for additional information and exercises on goal setting.

Benefits of Goal Setting

- Increases athlete's level of physical fitness
- Teaches self-discipline
- Teaches the athlete sports skills that are essential to a variety of other activities
- Provides the athlete with a means for self-expression and social interaction

Goal Setting and Motivation

Developing Self-Confidence through Goal Setting

Accomplishing goals at practice through repetition in settings similar to the competition environment will instill confidence. Setting goals is a joint effort between athletes and coaches. The main features of goal setting include:

1. Goals must be structured as short-term, intermediate and long-term.
2. Goals should be viewed as stepping stones to success.
3. Goals must be accepted by the athlete.
4. Goals should vary in difficulty — from easily attainable to challenging.
5. Goals must be measurable.
6. Goals should be used to establish the athlete's training and competition plan.

Athletes with or without an intellectual disability may be more motivated by accomplishing short-term goals than long-term goals; however, do not be afraid to challenge athletes. Include athletes in setting their personal goals. Awareness of why the athlete is participating is also important when setting goals. There are participation factors which may influence motivation and goal setting:

- Age appropriateness
- Ability level
- Readiness level
- Athlete performance
- Family influence
- Peer influence
- Athlete preference

Performance Goals versus Outcome Goals

Effective goals focus on performance, not outcome. Performance is what the athlete controls. Outcomes are frequently controlled by others. An athlete may have an outstanding performance and not win a contest because other athletes have performed even better. Conversely, an athlete may perform poorly and still win if all other athletes perform at a lower level. If an athlete's goal is to run a personal best time in a competition, the athlete has greater control in achieving this goal than winning. This performance goal ultimately gives the athlete more control over his/her performance.

Motivation through Goal Setting

Goal setting has proved to be one of the most simple and effective motivational devices developed for sport within the past three decades. While the concept is not new, today the techniques for effective goal setting have been refined and clarified. Motivation is all about having needs and striving to have those needs met. How can you enhance an athlete's motivation?

1. Provide more time and attention to an athlete when he/she is having difficulty learning a skill.
2. Reward small gains of achievement in skill level.
3. Develop other measures of achievement outside of winning.
4. Show your athletes that they are important to you.
5. Show your athletes that you are proud of them and excited about what they are doing.
6. Fill your athletes with self-worth.

Goals give direction. They tell us what needs to be accomplished. They increase effort, persistence and the quality of performance. Establishing goals also requires that the athlete and coach determine techniques for how to achieve those goals.

Measurable and Specific

Effective goals are very specific and measurable. Goals stated in the form of "I want to be the best that I can be!" or "I want to improve my performance!" are vague and difficult to measure. It is positive sounding but difficult, if not impossible, to assess whether they have been reached. Measurable goals must establish a baseline of performance recorded during the past one or two weeks for them to be realistic.

Difficult, but Realistic

Effective goals are perceived as challenging, not threatening. A challenging goal is one perceived as difficult but attainable within a reasonable amount of time and with a reasonable amount of effort or ability. A threatening goal is one perceived as being beyond one's current capacity. Realistic implies that judgment is involved. Goals based upon a baseline of performance recorded during the past one or two weeks are likely to be realistic.

Long- versus Short-Term Goals

Both long- and short-term goals provide direction, but short-term goals appear to have the greatest motivational effects. Short-term goals are more readily attainable and are stepping stones to more distant long-term goals. Unrealistic short-term goals are easier to recognize than unrealistic long-term goals. Once they are identified, unrealistic goals can then be modified before valuable practice time has been lost.

Positive versus Negative Goal Setting

Positive goals direct what to do rather than what not to do, whereas negative goals direct our attention too heavily to the errors we wish to avoid or eliminate. Positive goals also require coaches and athletes to decide how they will reach those specific goals. Once the goal is decided upon, the athlete and coach must determine specific strategies and techniques which allow that goal to be successfully attained.

Set Priorities

Effective goals are limited in number and meaningful to the athlete. Setting a limited number of goals requires that athletes and coaches decide what is important and fundamental for continued development. Establishing a few carefully selected goals also allows athletes and coaches to keep accurate records without becoming overwhelmed with record keeping.

Mutual Goal Setting

Goal setting becomes an effective motivational device when athletes are committed to achieving those goals. When goals are imposed or established without significant input from the athletes, motivation is unlikely to be enhanced.

Set Specific Time Lines

Target dates provide urgency to an athlete's efforts. Specific target dates tend to eliminate wishful thinking and clarify which goals are realistic and which are not. Time lines are especially valuable in high-risk sports where fear often promotes procrastination in learning new skills.

Formal versus Informal Goal Setting

Some coaches and athletes think that goals must be set in formal meetings outside of practice and require long periods of thoughtful evaluation before they are decided upon. Goals are literally progressions that coaches have been using for years but are now expressed in measurable performance terms rather than as vague, generalized outcomes.

Goal Setting Domains

When asked to set goals, athletes typically focus on the learning of new skills or performances in competitions. A major role of the coach is to broaden the athlete's perception of those areas, and goal setting can be an effective tool. Goals can be set to enhance fitness, improve attendance, increase intensity, promote sportsmanship, develop team spirit, find more free time or establish consistency.

Goal Setting Summary

Setting goals is a joint effort between the athlete and coach. Following are the main features of goal setting:

Structured into short-term and long-term

- Stepping stones to success
- Must be accepted by the athlete
- Vary in difficulty from easily attainable to challenging
- Must be measurable

Short-Term Objective

- Learning snowshoeing in a fun environment

Long-Term Goal

The athlete will acquire basic snowshoeing skills, appropriate social behavior and functional knowledge of the rules necessary to participate successfully in snowshoeing competitions.

Assessing Goals Checklist

1. Write a goal statement.
2. Does the goal sufficiently meet the athlete's needs?
3. Is the goal positively stated?
4. Is the goal under the athlete's control?
5. Is the goal a goal and not a result?
6. Is the goal important enough to the athlete that he/she will want to work toward achieving it?
7. What barriers might the athlete encounter in working toward this goal?
8. What does the athlete need to learn?
9. What risks does the athlete need to take?

Planning a Snowshoeing Training Season

It's important to start off the snowshoeing training season with a plan for the season. A training season plan must take into account the competition schedule and the development and preparation of the athletes for those competitions. Season plans consist of three components: Preseason, In-season and Postseason.

The training season plan should incorporate the components that will allow the athletes to reach or attain the goals that they set at the beginning of the season. The goals may vary widely and should thus be adaptable as practical to the individual athletes' goals, which may range from competition to a weekly workout.

Developing a Season Plan

The snowshoeing coach needs to prepare for the upcoming season. The list below offers some suggestions on getting started.

- Improve knowledge of snowshoeing and coaching skills by attending training sessions and clinics.
- Recruit assistant coaches.
- Locate a facility for practice sessions.
- Arrange for needed equipment.
- Recruit volunteers to transport the athletes to and from practice and/or competition.
- Recruit athletes.
- Ensure that all prospective snowshoeing athletes are registered Special Olympics athletes.
- Establish goals and draw up a training plan such as the one provided later in this guide.
- Try to schedule at least one training session per week.
- If possible, develop a home training program.

Preseason

Maintaining overall fitness during the spring, summer and fall is the best preparation for a snowshoeing season. A steady progression to build up strength and conditioning is best. Running is the best preparation for snowshoeing.

In-season

This is where the plan comes into action. Plan each practice session according to what needs to be accomplished. Training can be done on snow, sand or soft grass. Just because there is no snow, it doesn't mean that training cannot occur. A limited amount of training in snowshoes on these surfaces will not greatly damage the equipment and will help athletes familiarize themselves with the sport if no snow is present.

During the first practice, administer the Sports Skills Assessment Test and set the athletes' goals according to individual ability levels. Orient the athletes to the facility and their equipment. The goals and skills of the athletes should be monitored periodically throughout the season with modification to the training session to enable the athletes to meet their goals. As competition approaches, try to simulate race conditions for athletes. Relays are a good way to prepare the athletes for the excitement of racing and teamwork. If on-snow time is limited, emphasize conditions that simulate races or race pace as much as possible when you do get a chance to be on snow.

Postseason

Once the season is over, this is the time to thoroughly evaluate the athletes' progress against goals set and provide feedback to the athletes. Develop off-season training plans for those athletes who wish to train in the off-season. Off-season training plans should be consistent with the athletes' overall training goals.

Evaluate the training plan and make modifications for next year's season. Request feedback from athletes, assistant coaches, parents, etc., for use in modifying next year's training program.

Snowshoeing Training Session

Planning a Snowshoeing Training Session

Each training session needs to contain the same essential elements. The amount of time spent on each element will depend on the goal of the training session, the time of season the session is in and the amount of time available for a particular session. The following elements need to be included in the training session; however, times may vary depending on the specific requirements of the session.

The Warm-up	10-15 minutes
Specific Event Workout	15-20 minutes
Conditioning or Fitness Workout	15-20 minutes
The Cool-down	10-15 minutes

NOTE: Please refer to the Teaching Snowshoeing Skills Sections in each area for more in-depth information and guidance on these topics.

Principles of Effective Training Sessions

Keep all athletes active	Athlete needs to be an active listener
Create clear, concise goals	Learning improves when athletes know what is expected of them
Give clear, concise instructions	Demonstrate – increase accuracy of instruction
Record progress	You and your athletes chart progress together
Give positive feedback	Emphasize and reward things the athlete is doing well
Provide variety	Vary exercises – prevent boredom
Encourage enjoyment	Training and competition is fun; help keep it this way for you and your athletes
Create progressions	Learning is increased when information progresses from: • Known to unknown – discovering new things successfully • Simple to complex – seeing that "I" can do it • General to specific – this is why I am working so hard
Plan maximum use of resources	Use what you have and improvise for equipment that you do not have – think creatively
Allow for individual differences	Different athletes, different learning rates, different capacities

Tips for Conducting Successful Training Sessions

1. Know what you want to do and how you plan to do it before the session.
2. Assign assistant coaches their roles and responsibilities in accordance to your training plan.
3. The two most important elements you can bring to practice are a high level of enthusiasm and a willingness to be flexible.
4. When possible, have all equipment and stations prepared before the athletes arrive.
5. Arrange the athletes in a semicircle in front of you.
6. Introduce and acknowledge coaches and athletes.
7. Review intended program with everyone. Keep athletes informed of changes in schedule or activities.
8. As you speak, make eye contact with all athletes. Speak simply and clearly. Do not give long demonstrations and explanations.
9. Ask questions to ensure that everyone knows what to do.
10. Encourage athletes to imitate your technique.
11. Keep everyone moving.
12. Watch for fatigue and listen to athletes who say they are cold.
13. Emphasize "doing" rather than "watching." Athletes will learn best by participating in a variety of fun exercises and games. Create a playground in the snow, which incorporates snowshoeing skills. For example, you could use obstacles or existing trees or shrubs to create a course to follow. As the athletes become more proficient, advanced terrain will replace the challenge of games.
14. Keep the activities challenging and fun and always provide positive feedback to the athletes.
15. Keep the **Fun** in fundamentals.
16. Alter the plan according to weather, the facility and the needs of the athletes.
17. Give the athletes plenty of time to become familiar with a new skill before teaching another one.
18. Keep drills and activities brief so athletes do not get bored. Keep everyone busy with an exercise even if it is rest.
19. If an activity is going well, it is often useful to stop the activity while interest is high. Change activities before the athletes lose interest.
20. Devote the end of the practice to a group activity that incorporates challenge and fun, so athletes have something to look forward to.
21. Summarize the session and announce arrangements for next session.

Tips for Conducting Safe Training Sessions

Preparing for Safety

1. The head coach ensures that the rules are set before the first practice session.
2. Choose a safe location for practice. Remove obstacles from area.
3. Avoid narrow, tree-lined and icy areas.
4. Choose terrain or trails appropriate to the athletes' skills.
5. Check all equipment for damage.
6. Check the first-aid kit: Restock supplies as necessary.
7. Provide emergency procedures. Train all athletes and coaches in these procedures.
8. Identify the nearest phone accessible during practice or have a working cellular telephone on site.
9. Establish clear rules for behavior at the first practice. Repeat and enforce them throughout the year.
10. Everyone must keep their poles down if used.
11. No one snowshoes alone. Require the buddy system.
12. Encourage everyone to wear appropriate clothing and eyewear.
13. Be aware of the weather and how it may change.
14. Provide proper stretching exercises after warming up at the beginning of each practice.
15. Provide activities that will improve general fitness levels. Fit athletes are less likely to get injured.
16. Make practices active; keep everyone moving.
17. Provide one-on-one instruction whenever possible.
18. Wear non-breakable sunglasses or goggles.
19. If snowshoeing on a trail, stay to the right.
20. Check equipment often.
21. Recognize that the metal claws on some snowshoes can be sharp and should be handled with care.

Training Program

Ideally, athletes need to train – compete – train – compete to achieve optimum benefits from sport participation. Your creativity is the key to helping athletes learn and enjoy themselves at the same time in both the training and competing environments. The following sample eight-week training program may help you to develop individualized training programs for your athletes. Please incorporate parts of this program as they meet the needs of your snowshoers.

Week One
1. Make introductions and do an overview of season schedule 2. Teach warm-up and stretching routines 3. Introduce basic snowshoeing skills 4. Play an active game 5. Cool down 6. Make closing remarks and distribute home training plan
Week Two
1. Warm-ups and stretches 2. Review previously taught skills 3. Administer Snowshoe Skills Assessment 4. Play a fun game 5. Cool-down and remarks
Week Three
1. Warm-ups and stretches 2. Review previously taught skills 3. Introduce new skills 4. Break athletes into skill groups for specific instruction 5. Play a short game or mini competition 6. Cool-down and remarks
Week Four
1. Warm-ups and stretches 2. Review previously taught skills 3. Introduce new skills 4. Break into skill groups 5. Go on a long-distance hike appropriate to various skill levels 6. Cool-down and remarks
Week Five
1. Warm-ups and stretches 2. Review previously taught skills 3. Introduce new skills 4. Break into skill groups 5. Practice sprint starts and speed races 6. Have a fun race 7. Cool-down and remarks

Week Six
1. Warm-ups and stretches 2. Review previously taught skills 3. Introduce new skills 4. Break into skill groups 5. Practice relay races or play a game 6. Cool-down and remarks
Week Seven
1. Warm-ups and stretches 2. Have a mini competition 3. Fitness training 4. Cool-down and remarks
Week Eight
1. Warm-ups and stretches 2. Work on weaknesses seen in mini competition 3. Play a fun game 4. Cool-down 5. Coordinate for upcoming event

Snowshoeing Practice Competitions

Typically, the more we compete, the better we get. A practice competition is a good way to assess the athletes. It can be just a race between two teams or a small individual skill (for example, uphill techniques) tournament of local athletes. Expand or add to your schedule as many competition opportunities as possible. Here are a few suggestions:

1. Host practice competitions with adjacent local Programs.
2. Ask the local high school whether your athletes can compete with them in practice meets.
3. Join the local community snowshoeing league, club and/or association.
4. Create your own snowshoeing league or club in your community.
5. Incorporate competition components at the end of some training sessions.

Increasing competition opportunities for athletes is one of the coach's responsibilities. All athletes may compete at an end-of-the-season local event; however, only a small percentage of athletes may go on to the highest level of competition offered by the Program. Competition is a way to measure progress and demonstrate skills mastered. One opportunity per year is not enough.

Snowshoeing Skills Assessment

Athlete Name _____ **Start Date** _____

Coach Name _____

Instructions

1. Use tool at the beginning of the training/competition season to establish a basis of the athlete's starting skill level.
2. Have the athlete perform the skill several times.
3. If the athlete performs the skill correctly three out of five times, check the box next to the skill to indicate that the skill has been accomplished.
4. Schedule several Assessment Sessions into your program.
5. Snowshoers may accomplish skills in any order. Athletes have accomplished this list when all possible items have been achieved.

Stretching

☐ Knows stretches for calves, hamstrings, groin, quadriceps, triceps and shoulders

☐ Performs stretches

Dry Land or Inside Activity Warm-Ups

☐ Knows warm-up exercises

☐ Performs dry land warm-up exercises

☐ Performs on-snow exercises

Putting on Snowshoes

☐ Identifies parts of a snowshoe

☐ Identifies left and right snowshoes

☐ Positions foot properly

☐ Tightens straps securely

Removing Snowshoes

☐ Loosens straps and removes foot from shoe

Avoiding Snowshoe Overlap

☐ Stands on snowshoes without assistance

☐ Understands the concept of snowshoe overlap

☐ Spreads feet/snowshoes farther apart and moves them closer together

Walking Forward

☐ While walking, see if overlap occurs

Stopping and Recovery

- ☐ Stops intentionally
- ☐ Gets up without assistance

Turning

- ☐ Stands on one leg
- ☐ Takes long enough strides to avoid overlapping snowshoes
- ☐ Plants snowshoe flat on snow

Climbing Hills

- ☐ Ascends the most direct route on the hill
- ☐ Stamps with the toe to dig the cleat into the snow
- ☐ Uses arms to power up the hill

Descending Hills

- ☐ Keeps the weight forward
- ☐ Takes long striding, gliding steps, being careful not to over stride
- ☐ Identifies and goes down the fall line

Sprint Starts

- ☐ Stands upright with one leg in front, ready to start, with knees bent
- ☐ Thrusts upward with rear leg and forward pumping arms
- ☐ Uses the front leg as an anchor serving as the base for the thrust
- ☐ Performs the sprint start without falling

Sprinting

- ☐ Synchronizes arm and leg movements for maximum speed (right arm goes forward as left leg goes forward)
- ☐ Moves in a straight line

Distance Snowshoeing

- ☐ Breathes effectively
- ☐ Controls arms and keeps elbows in
- ☐ Runs by lifting the feet as little as possible
- ☐ Makes short strides to conserve energy
- ☐ Runs an even-paced race

Daily Performance Record

The Daily Performance Record is designed for the coach to keep an accurate record of the athlete's daily performances while learning a sports skill. There are several reasons why the coach can benefit from using the Daily Performance Record.

1. The record becomes a permanent documentation of the athlete's progress
2. The record helps the coach establish measurable consistency in the athlete's training program.
3. The record allows the coach to be flexible during the actual teaching and coaching session, breaking down the skills into specific, smaller tasks that meet the individual needs of each athlete.
4. The record helps the coach choose proper teaching methods, conditions and criteria for evaluating the athlete's performance of the skills.

Using the Daily Performance Record

At the top of the record, enter the coach's name, the athlete's name, and the snowshoeing event. If more than one coach works with the athlete, they should enter the dates that they work with the athlete next to their names.

Before the training session begins, the coach decides what skills will be covered. The coach makes this decision based on the athlete's age, interests and mental and physical abilities. The skill needs to be presented as a statement or a description of the specific exercise that the athlete must perform. The coach enters the skill on the top line of the left-hand column. Each subsequent skill is entered after the athlete masters the previous skill. Of course, more than one sheet may be used to record all of the skills involved. Also, if the athlete cannot perform a prescribed skill, the coach may break down the skill into smaller tasks that will allow for the athlete's success at the new skill.

Conditions and Criteria for Mastering

After the coach enters the skill, then decide on the conditions and criteria by which the athlete must master the skill. Conditions are special circumstances which define the manner in which the athlete must perform a skill; for example, "given a demonstration, and with assistance." The coach should always operate under the assumption that the ultimate conditions in which the athlete masters a skill are "upon command and without assistance," and therefore, does not have to enter these conditions in the record next to the skill entry. Ideally, the coach arranges the skills and conditions so that the athlete gradually learns to perform the skill upon command and without assistance.

Criteria are the standards that determine how well the skill must be performed. The coach needs to determine a standard that realistically suits the athlete's mental and physical abilities; for example, "perform a distance of 30 meters, 60 percent of the time." Given the varied nature of skills, the criteria might involve many different types of standards, such as amount of time, number of repetitions, accuracy, distance or speed.

Dates of Sessions and Levels of Instruction Used

The coach may work on one task for a couple of days and use several methods of instruction during that time to progress to the point where the athlete performs the task upon command and without assistance. To establish a consistent curriculum for the athlete, the coach must record the dates of work on particular tasks and the methods of instruction used on those dates.

Event: _____ **Athlete's Name** _____

Skill: _____ **Coach's Name** _____

Skill Analysis	Conditions & Criteria	Dates & Instruction Methods	Date Mastered

Instruction Methods: PA (Physical Assistance), PP (Physical Prompting), D (Demonstration), VeC (Verbal Cue), ViC (Visual Cue) WA (Without Assistance)

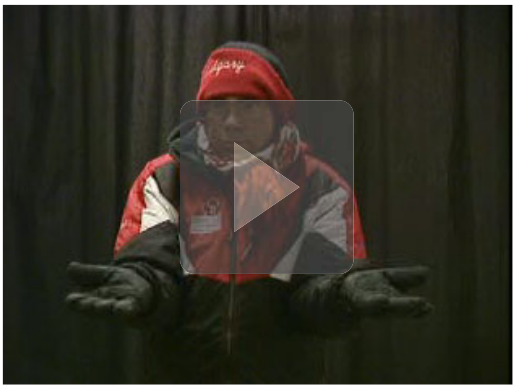
Weekly Home Training

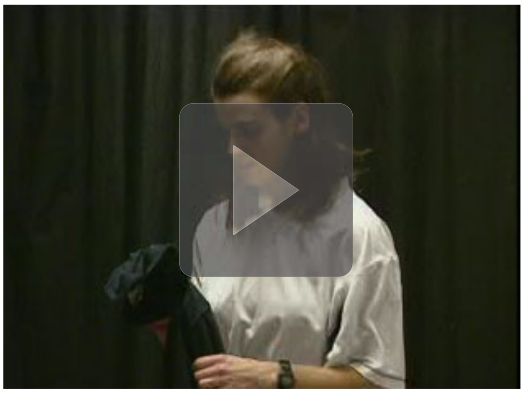
Each athlete needs to recruit a partner who will train with him or her at home. This can be a sibling, parent or friend. The athlete and partner must push each other to make training effective.

Warm-Up Exercises	Instructions
Walking	Walk around in the snow for two minutes, and then jog in place for two minutes.
Arm Circles	Hold arms out to sides at shoulder height; make 15 small circles rotating arms forward. Rest, repeat arm circles by rotating arms backward 15 times.
Calf/Achilles Stretch	Stand facing a wall or fence with one leg in front of the other. Bend your forward leg slightly. Bend at the ankle of your back leg. Remember, you do not want to feel pain, only slight tension of the muscle stretching.
Push-Ups	Kneel down and place your hands on the ground in front of body, shoulder width apart. With a straight back, move your feet back behind you until you are on your toes. Your weight is on both your hands and feet. Slowly bend your arms until they are parallel to the ground. You chest will drop 4-5 inches from the ground. Push up to the starting position. Repeat five times. Try and work up to 10 or more. Remember to fully extend your arms in the start position, with a straight back. You can help keep a straight back by squeezing your stomach muscles.
Sit-Ups	Lie on your back with your knees bent. Your hands can be on your chest or shoulders or on the side with your fingers touching your ears. Your elbows are out to the side. Keep back straight as you slowly lift your shoulders, coming all the way up to a sitting position. Squeeze your stomach muscles as you slowly return to the start position. Repeat 10 times. Try and work up to two or three sets of 10. Rest for 30 seconds between sets. Remember, the wider apart the hands. the more the athlete works on the chest muscles.
Exercise for the Week (Exercise a minimum of 10 minutes)	
1. Set up a 10-meter course 2. Practice snowshoe starts 3. Race 10 times	Each week, increase the distance to 25 meters, then 50, then 100. Time each race to seek improvement. Practice putting on snowshoes, falling down and getting up. For distance snowshoers, jog at least two times a week in addition to regular training sessions.

Snowshoeing Attire

Clothing must be appropriate to the weather conditions. Incorporate the "25° F rule" when training and competing. This means that if the temperature outside is 40° F (4.4° C), dress as if it is 65° F (18.3° C). This is how warm you will feel from the heat generated by your workout. It is best to dress in layers so you can add or subtract clothes as needed. Always bring too many clothes instead of too few.





Socks

Socks are a personal preference, but it is suggested that a wool or blended-material ski or hiking sock be used for snowshoeing. Definitely avoid cotton socks because they absorb moisture, are poor insulators and will result in blisters. It is recommended that liner socks made of synthetic or natural fibers be worn underneath insulated socks. The liners will help wick away perspiration and moisture from the foot and add more insulation layers of air. The liners will also absorb the friction between the feet and outer socks to prevent blisters.

Footwear

Any type of shoe can be used. Running shoes and cross-training sneakers are popular because of their light weight and comfort. The heavier the shoe, the more weight the back will feel while running. Boots may be used in colder weather, but be sure that there is flexibility in the ankles and that the boot can remain securely attached to the foot while walking and running. The most important thing is to keep the feet dry and comfortable. It is recommended that the shoes fit comfortably with the socks that will be worn while snowshoeing. Booties that fit over the shoe and cover the space between the top of the shoe and the bottom of the pants are very useful. Neoprene cycling booties are great to use over running shoes.

The key in snowshoeing is that the boot or shoe is the interface with the snowshoe. The snowshoer's warmth comes from the exercise and layering, rather than bulky boots. Heavy boots will make it harder to snowshoe because they add weight. Additionally, they may cause excessive foot perspiration, which can lead to cold feet very quickly.

Mukluks or moccasins can be used in combination with a traditional wood snowshoe and binding. Mukluks or moccasins can have a crepe/ rubber sole and felt insert to provide protection. Mukluks are known for being warm, comfortable and lightweight. These typically provide a good interface with the snowshoe.

Pants and Tops

Incorporate the three-layer system. It's simple and it works well.

Inside Layer

The inside (or inner or base) layer is the wicking layer. Long underwear made of synthetic materials, natural materials (silk) or treated materials will remove perspiration from the body. Both the upper and lower body should be covered by a wicking layer. A shirt that covers the neck and fits snugly at the wrists is an effective way to conserve body heat.

Middle Layer

The middle layer should be an insulating layer and consist of wool (sweater or pants), fleece (top or bottom) or treated material. Synthetic insulations or phase change treatments have also proven to be lightweight but very effective. This layer provides warmth by trapping a layer of air around the body.

NOTE: Except in extremely cold conditions, the legs do not need and would be constricted by this layer.

Outer Layer

Wind and snow are blocked by the weatherproof outer layer. For the legs, nylon wind pants are good. If wind pants are not available, choose looser-fitting synthetic sweatpants. A lined windbreaker or warm-up jacket works well on top. Clothing that uses laminates that are waterproof, windproof and breathable (allowing perspiration to leave the body) can be useful. Be aware that absorbent clothing such as cotton sweatpants will provide little protection from the wind and cold. Snowshoes tend to kick up loose snow on the legs and back, and this is best shed by a slick and smooth nylon outer layer. Snowshoeing can be a highly aerobic activity that can generate a tremendous amount of heat and require clothing to allow unrestrictive movement.

Consider the ability of your athlete, the weather and the distance of the event when deciding upon clothing for competition. For optimal competition, strive to dress your athlete in clothing that is lightweight, breathable, layered and slick on the outer surface, and that allows unrestrictive movement. Consider having the athlete wear a thick, heavy, easily removed jacket and pants over everything to keep warm between events. At many competitions, the greatest challenge is staying warm while standing around between events. These bulky layers should have the ability to be easily and quickly removed and put back on before and after events. Do not neglect an extra set of warm, dry clothes to change into for athletes whose competition clothes will get wet with perspiration during longer races.

Accessories

Knitted hats are necessary to keep heat from escaping through the head. Gloves or mittens with the same three layers—synthetic base, thermal insulation layer and wind/waterproof outer layer—are needed according to weather conditions. Suitable eye protection is recommended to protect the eyes from damaging ultraviolet rays and glare and from snow kicked up by the snowshoes. Polarized sunglasses will cut glare, and high-quality glasses will be less likely to fog. Remember that if the glasses fog up, a sunglass-friendly soft handkerchief should be used.

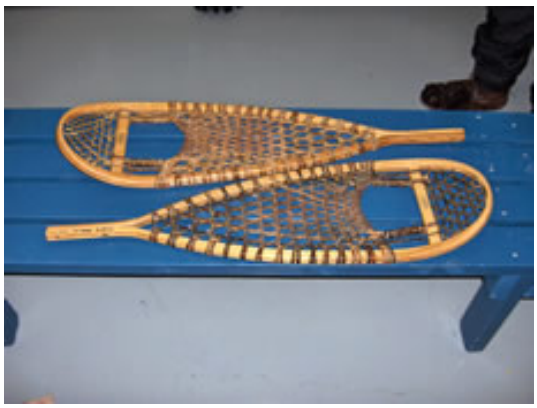
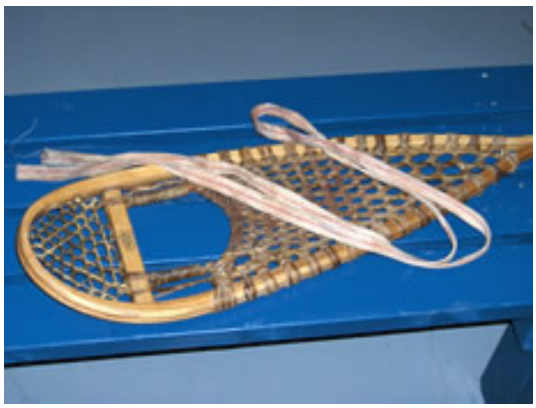
Snowshoeing Equipment

Securing proper equipment is essential for good, safe snowshoeing, so getting the correct type of snowshoe is the most important decision to make. There are two types of snowshoes: traditional wooden-framed snowshoes and metal snowshoes which are made from aluminum, rubber, and other "high tech" materials. To be competitive, it is recommended that a snowshoe specifically produced for competition be used. These snowshoes are lighter, smaller and asymmetrical (see explanation below).

Snowshoes

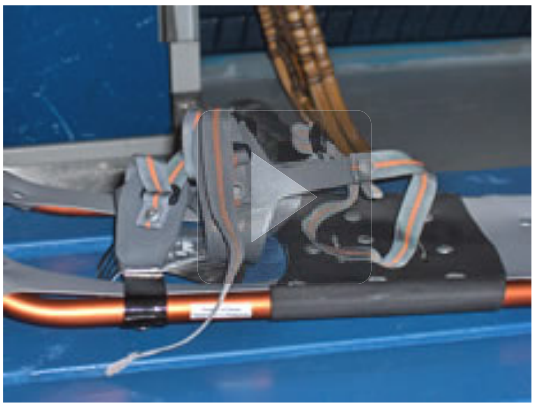
Shoe weight and size are critical in snowshoeing. It is estimated that one extra pound on the foot equals 5-10 pounds of weight on the back. Also, a narrower frame is better to keep the weight centered and the legs directly beneath the torso, so that the frame will not hit the lower legs as much. Body weight is a very small factor. Everyone will sink in dry, powdery snow no matter how big the snowshoes are, but even the heaviest athlete will be able to snowshoe in moist, compacted snow in smaller shoes. Keep the snowshoe as small as possible for the snow conditions. Rules state that the snowshoe must be at least eight inches wide and 25 inches long (20.5cm by 64 cm). This size works best for most adult athletes.

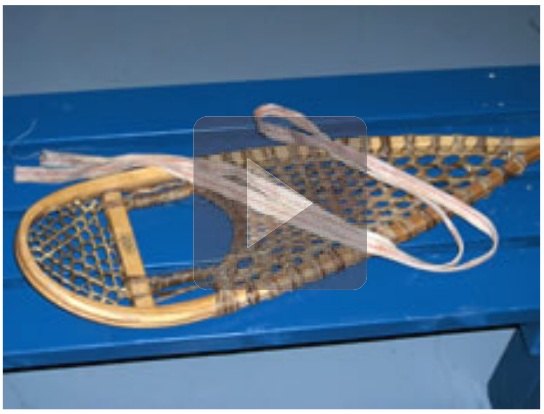


Snowshoe Anatomy

There are six parts to any snowshoe.





Frame

This is the outside of the snowshoe that gives it shape. It is made of aluminum, wood or extruded synthetic materials and may be in a symmetrical or asymmetrical form. The symmetrical frame centers the foot in the middle of the shoe while the asymmetrical frame is more in the shape of the foot, with a right and left shoe, allowing the feet to be closer together and eliminating the "snowshoe waddle." The toe of the frame is raised up and the tail is weighted to ensure better movement and make sure that snow does not collapse on the shoe. Generally, the smallest frame that allows flotation on the snow is best for racing.

Binding System

This secures the athlete's shoe to the snowshoe. Look for a solid landing platform, little movement inside the binding, comfort and no contact with the frame. Wooden snowshoes have a binding that is typically made of leather and attached at the toe cord. The alternate form of binding for wooden snowshoes is lamp wick (1 ½-inch flat cotton cord); the use of lamp wick requires the footwear to be modified to include loops on each side.

Pivot System

This allows for normal walking motion. There is a hole in the decking that allows the toe of the foot to go into the snow and push off while the frame remains on the surface of the snow. The pivot system on a wooden showshoe is formed when the binding is attached to the snowshoe.

Toe Cords

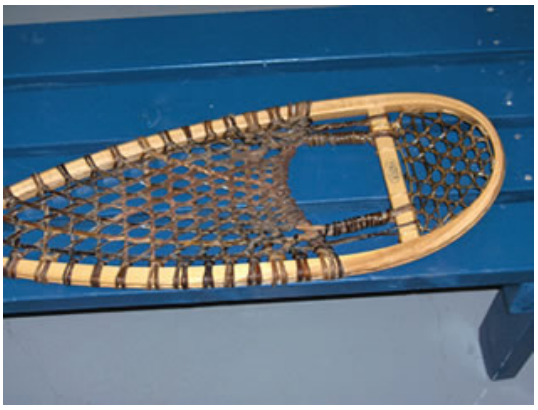
Toe cords are the part of snowshoes that connect the outer frame to the binding.

Crampons/ Cleats or Claws (Metal Snowshoe Only)

Spikes and claws grab the snow and provide traction when conditions are slippery. They are located beneath the binding, which also allows them to aid in pushing off. Rear traction devices under the snowshoe where the heel strikes are important for downhill traction and safety.

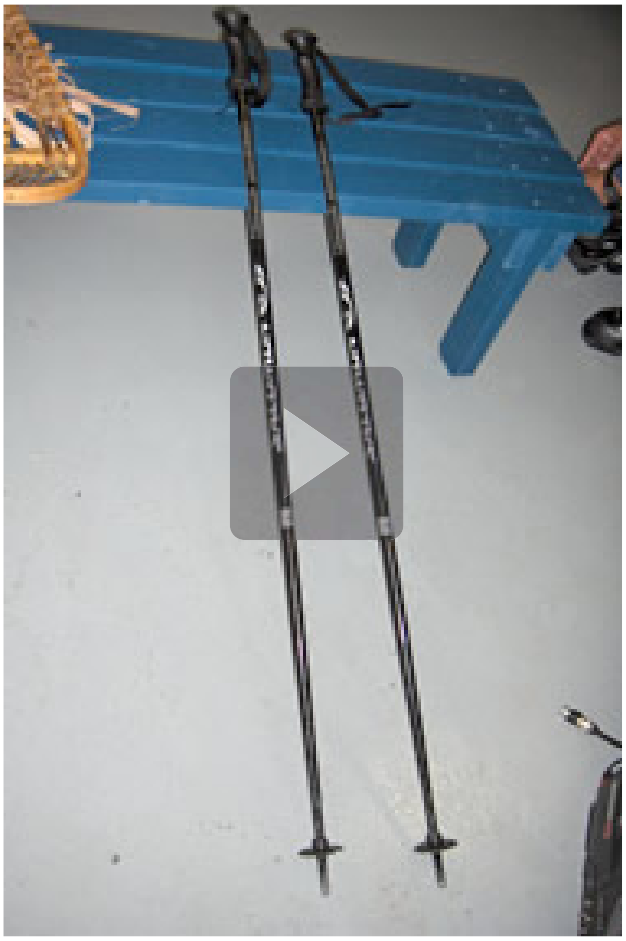
Decking

The decking material is attached to the frame and provides the majority of the flotation.



Poles

Most snowshoers do not use poles. Snowshoes provide much more traction, flotation and stability than a regular shoe, which helps most athletes negotiate slick, loose, deep and uneven snow with ease. Try to get your athletes to snowshoe without poles, if possible. Using poles is another action to coordinate when snowshoeing, and this will take more energy and motor control. If an individual can walk and run without poles when not wearing snowshoes, then he or she can snowshoe without poles. Certain athletes with very poor balance, strength or coordination may benefit from using poles. Ski poles that are long enough to reach from the ground to the elbow when the arm is hanging at rest are the proper length.



SNOWSHOEING COACHING GUIDE

Teaching Snowshoeing Skills

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The Warm-Up

Snowshoeing is an aerobic activity, which exercises the entire body. Warm-up activities will physically prepare the body for snowshoeing and will also increase flexibility, which helps to prevent injury.

Warming up is a basic and extremely important part of the practice routine. It focuses the athlete mentally, raises the body temperature and prepares the muscles, tendons and cardiovascular system for upcoming stretches and activities. By increasing the elasticity of the muscles, the chance of injury is reduced.

A warm-up period is the first part of every training session or preparation for competition. The warm-up starts slowly and systematically and gradually involves all muscles and body parts that prepare the athlete for training and competition. In addition to preparing the athlete mentally, warming up also has several physiological benefits, such as:

1. Raises body temperature
2. Increases metabolic rate
3. Increases heart and respiratory rate
4. Prepares the muscles and nervous system for exercise

The warm-up is tailored for the activity to follow. Warm-ups consist of active motion leading up to more vigorous motion to elevate heart, respiratory and metabolic rates. The total warm-up period takes at least 25 minutes and immediately precedes the training or competition. A warm-up period can include the following basic sequence and components.

Activity	Purpose	Time (minimum)
Slow aerobic walk/ fast walk/ jog/ run	Heat muscles	5 minutes
Stretching	Increase range of movement	10 minutes
Event Specific Drills	Prepare for training	10 minutes
Competition Final Warm-Up	Prepare for competition	20 minutes

Aerobic Warm-Up

This includes activities such as walking, light jogging, walking while doing arm circles, jumping jacks.

Walking/ Jogging

Walking is the first exercise of an athlete's routine. Athletes begin warming the muscles by walking slowly for 3-5 minutes. This circulates the blood through all the muscles, thus providing them greater flexibility for stretching. The sole objective of the walking warm-up is to circulate the blood and warm the muscles in preparation for more strenuous activity.

Running

Running is the next exercise in an athlete's routine. Athletes begin warming the muscles by running slowly for 3-5 minutes. This circulates the blood through all the muscles, thus providing them greater flexibility for stretching. The run starts out slowly, and then gradually increases in speed; however, the athlete never reaches even 50 percent of maximum effort by the end of the run. Remember, the sole objective of this phase of the warm-up is circulating the blood and warming the muscles in preparation for more strenuous activity.

Stretching

Stretching is one of the most critical parts of the warm-up and an athlete's performance. A more flexible muscle is a stronger and healthier muscle. A stronger and healthier muscle responds better to exercise and activities and helps prevent injury. Please refer to the stretching section for more in-depth information.

Event Specific Drills

Drills are progressions of learning that start at a low ability level, advance to an intermediate level, and finally reach a high ability level. Encourage each athlete to advance to the highest possible level.

Kinesthetic movements are reinforced through repetitions of a small segment of the skill to be performed. Many times, the actions are exaggerated in order to strengthen the muscles that perform the skill. Each coaching session should take athletes through the entire progression so that they are exposed to the total of all of the skills that make up an event.

Competition Final Warm-Up

Initial two phases of warm-up can be conducted inside a building or facility if space permits. Make sure the athletes stay warm if they conduct their initial warm-up outside, especially during the stretching phase.

Warm-Up Example

400-meter or less Warm-Up

- Could be up to 800 meters
- Starts
- Accelerates to top speed for shorter distances (10 m) with a gradual slow-down
- Form Drills
  - High knee lifts
  - Butt kicks
  - Bounding
  - Quick steps
  - Exaggerated arm swings
  - Relay exchanges

Distance (800 meters or more) Warm-Up

- Could be 800 meters or more
- Accelerate to race pace for 100m to 400m—up to four repetitions
- Form Drills (not as emphasized as in shorter distances)
  - Bounding
  - Quick steps
  - High knee lifts
  - Butt kicks

Stretching

Flexibility is a major element to an athlete's optimal performance in both training and competing. Flexibility is achieved through stretching, a critical component in warming up. Stretching follows an easy aerobic walk/ fast walk/ run at the start of, or end of, a training session or competition.

Begin with an easy stretch to the point of tension and hold this position for 15-30 seconds until the pull lessens. When the tension eases, slowly move further into the stretch until tension is again felt. Hold this new position for an additional 15 seconds. Each stretch should be repeated four to five times on each side of the body.

It is also important to continue to breathe while stretching. As you lean into the stretch, exhale. Once the stretching point is reached, keep inhaling and exhaling while holding the stretch. Stretching should be a part of everyone's daily life. Regular, consistent daily stretching has been demonstrated to have the following effects:

1. Increase the length of the muscle-tendon unit
2. Increase joint range of motion
3. Reduce muscle tension
4. Develop body awareness
5. Promote increased circulation
6. Make you feel good

Some athletes, like those with Down syndrome, may have low muscle tone that makes them appear more flexible than they actually are. Be careful not to allow these athletes to stretch beyond a normal, safe range. Several stretches are dangerous to perform for all athletes and should never be part of a safe stretching program. These unsafe stretches include the following:

- Neck Backward Bending
- Trunk Backward Bending
- Spinal Roll
- Medial and Lateral Knee Bending

Stretching is effective only if the stretch is performed accurately. Athletes need to focus on correct body positioning and alignment. In the calf stretch, for example, many athletes do not keep the feet forward, in the direction that they are running.

As you can imagine, there are a host of stretches and variations to achieve your goals. However, focus on some basic stretches highlighting major muscle groups. Along the way, point out some common faults, illustrate corrections and identify stretches that are more event specific. In addition, remind the athletes to keep breathing while stretching. Start at the bottom of the body and work your way to the arms and neck.

Coaching Tips

- ❑ Try to have a low athlete/coach ratio.
- ❑ Coaches and assistants must make sure that stretches are being done effectively and are not harmful to the athlete. To do this may require direct, one-on-one physical assistance, particularly with lower ability players.
- ❑ Some stretches require a good sense of balance. If balance is a problem, use stretches that can be done while in a sitting or lying position.
- ❑ Coaches should attend to athletes doing the exercises improperly, as well as provide personal attention and reinforcement to those doing them effectively.
- ❑ Use stretching as a "teachable moment" with your athletes. Explain the importance of each stretching exercise and which muscle group is being stretched. Later, ask the athletes why each stretching exercise is important.

Lower Body

Calf Stretch

- Stand facing forward, with or without snowshoes on, toes pointed forward
- Place one leg out in front
- Bend forward leg slightly
- Bend ankle of back leg

Calf Stretch with Bent Knee

- Same as Calf Stretch but;
- Bend both knees to ease strain

Standing Hamstring Stretch

- Place one leg out in front (heel on the ground, toe pointing up), bending knee of opposite leg with heel flat on ground
- Legs are not locked
- Sit back on your heels

- As your athletes' flexibility increases, have them reach toward their feet

Standing Straddle Stretch

- Spread feet shoulder width apart, with or without snowshoes on
- Bend forward at hips
- Reach down along the legs toward the ground until you feel the stretch

Standing Quad Stretch

- Stand with one foot flat on ground
- Bend knee of other leg, reaching foot toward buttock while grasping ankle with hand
- Pull foot directly toward buttock
- Do not twist knee
- Stretch can be done standing alone or balancing with partner or fence/ wall

- If pain occurs in knees during stretch and foot is pointing out to the side, point foot back to relieve stress

Step Ups

- Place one foot onto support, with bent leg
- Push hips in, toward support

Forward Bend

- Stand, arms outstretched overhead
- Slowly bend at waist
- Bring hands to ankle level without strain

Low Back & Glutes

Side Groin Stretch

- Stand with feet flat on the ground, with or without snowshoes on
- Lean body to one side, bending knee slightly
- Keep opposite leg straight
- Repeat with other leg

Hip Stretch

- Stand, with or without snowshoes on, and place hands on low back
- Push hips forward
- Tilt head back

Downward Facing Dog

- Kneel, hands directly under shoulders, knees under hips
- Lift hips until standing on toes
- Drop heels to the ground
- Alternate rising to toes on one leg, while keeping the other foot flat on the ground

Upper Body

Chest Opener

- With partner, place one hand/arm on your partner
- Turn chest, facing outward, away from your partner
- Feel stretch in chest
- Repeat with other arm

Side Stretch

- Bend to one side with or without hand over head
- Feel stretch in side
- Repeat on other side

Shoulder Stretch

- Take elbow into hand
- Pull to opposite shoulder
- Arm may be straight or bent
- Repeat with other arm

Shoulder Shrugs

- Raise top of shoulder to ear
- Relax shoulders downward

Arm Circles

- Swing arms forward in large circles
- Repeat going forward and backward

Neck Stretch

- Roll the neck from shoulder to shoulder with chin touching body at all times
- Do not perform full circles as they may hyperextend the neck
- Tell athlete to roll neck to right, center and left. Never have the athlete roll neck backward.

Stretching – Quick Reference Guidelines

Start Relaxed

Do not begin until athletes are relaxed and muscles are warm

Be Systematic

Start at the bottom of body and work your way up

Progress from General to Specific

Start general, and then move into event-specific exercises

Easy Stretching before Developmental

Make slow, progressive stretches

Do not bounce or jerk to stretch farther

Use Variety

Make it fun

Use different exercises to work the same muscles

Breathe Naturally

Do not hold your breath

Stay calm and relaxed

Allow for Individual Differences

Athletes start and progress at different levels

Stretch Regularly

Always include time for warm-up and cool-down

Stretch at home

Teaching Snowshoeing

Special Olympics snowshoeing is a track and running competition on snow. Part of the appeal of snowshoeing is its simplicity. If you can walk, you can snowshoe! If you can run, you can snowshoe faster. Many of the techniques to better snowshoeing are subtle, and you can become almost an expert by mastering the skills here. Then it becomes a matter of practice and conditioning if your athletes wish to improve.

Snowshoeing Basic Skills

The following skills have been laid out to allow skill development and improvement from first-time snowshoer to competitive athlete.

Putting on Snowshoes

Most modern snowshoes have nylon strap binding systems whose use should be figured out and mastered in a warm, dry, indoor place before putting them on in the cold. It is important to note that your athletes should not move on hard surfaces with snowshoes on.

Skill Progression – Putting on Snowshoes

Your Athlete Can	Never	Sometimes	Often
Identify left and right snowshoes	☐	☐	☐
Loosen binding straps	☐	☐	☐
Place foot in proper position on snowshoe	☐	☐	☐
Tighten bindings properly	☐	☐	☐

Teaching Points

1. Begin by determining the left snowshoe from the right snowshoe, if this applies. Generally, most toe and heel binding straps pull to the outside.
2. Loosen binding straps so that there is sufficient play to insert your shoe easily.
3. Place your foot/shoe on the snowshoe so that the ball of the foot is centered over the toe cord.
4. Most snowshoe bindings work best if you snugly tighten the straps from front to back.
5. Place the heel strap around the back of your shoe in some type of obvious notch or indentation in the back of the shoe, usually found where the upper meets the sole or mid-sole. Keep this strap off your sock to avoid irritating your leg but high enough from the bottom sole to keep it from slipping off.
6. Pull the straps snug but not so tight that they pinch the toes and/or restrict movement and circulation.
7. Check the tightness of straps again after 3-5 minutes of snowshoeing warm-up.
8. If the snowshoes do not point straight ahead while walking or running, reposition the feet on the snowshoes at an angle and then firmly tighten the straps so the snowshoes point straight ahead.

Faults & Fixes – Putting on Snowshoes

Error	Correction	Drill Reference
Putting incorrect snowshoe on foot	Switch snowshoe to opposite foot	Repeat putting on correct snowshoes
Incorrect foot placement on snowshoe	Correctly place foot on snowshoe	
Snowshoe falls off	Tighten bindings	Repeat tightening bindings
Foot moves in binding	Tighten bindings	Repeat tightening bindings
Snowshoes do not point straight ahead while moving	Try to reposition foot on snowshoe	Have athlete move on snow, look at tracks

Removing Snowshoes

To remove snowshoes, simply reverse the order of binding-strap tightening used to put on the snowshoes. The skill of removing snowshoes should be practiced numerous times indoors when fingers are warm. It is important to note that your athletes should not move on hard surfaces with snowshoes on.

Skill Progression – Removing Snowshoes

Your Athlete Can	Never	Sometimes	Often
Loosen binding straps	☐	☐	☐
Move heel strap down off of heel	☐	☐	☐
Slide foot out of binding/snowshoe	☐	☐	☐
Totals			

Teaching Points

1. Loosen all binding straps. Don't pull binding strap completely out.
2. Move heel strap down, off heel of shoe/ boot.
3. Take weight off of foot, slide foot out of binding.
4. Repeat on other foot.
5. Make sure athletes only wear snowshoes outdoors.

Faults & Fixes – Removing Snowshoes

Error	Correction	Drill Reference
Shoe not coming off	Loosen binding straps	Repetition
Foot still connected at heel strap	Loosen heel strap	Repetition

Moving Forward

To move forward on snowshoes is as easy as walking. As a matter of fact, it is walking. The movement forward is just placing one foot forward while the other foot is stationary, while making sure that the snowshoe is lifted up and is moved outwards just enough to clear the ankle and the other snowshoe. It is important to avoid overlap to prevent falling. Once athletes can competently move forward, they will be able to progress to running and sprinting.

Skill Progression – Moving Forward

Your Athlete Can	Never	Sometimes	Often
Stand without assistance	☐	☐	☐
Move forward without assistance	☐	☐	☐
Increase stride length	☐	☐	☐
Increase stride rate	☐	☐	☐
Totals			

Teaching Points

1. Begin on very flat terrain with athlete standing.
2. Move first foot forward.
3. Raise and bring second foot forward allowing for the width of the snowshoe to clear the ankle.
4. Place second foot down ahead of first foot.
5. Repeat steps.
6. To move faster, increase stride rate and/or length.

Faults & Fixes – Moving Forward

Error	Correction	Drill Reference
Athlete cannot stand without assistance	Provide poles or device to help balance	Balance drills Snow Write Drill
Athlete kicks ankle	Spread feet farther apart	Manually demonstrate proper technique

Avoiding Snowshoe Overlap

A certain amount of distance is required between foot-plants to avoid overlapping the snowshoes. When overlap occurs with a shorter stride, the tail of the leading snowshoe lands on and presses down on some part of the frame of the trailing snowshoe. When the snowshoer tries to bring the trailing snowshoe forward and off the ground to start another stride, he or she cannot since the trailing snowshoe is pinned to the ground by the overlap.

Avoiding this overlap is the primary technique to be learned when snowshoeing. Snowshoe overlap most frequently occurs at slower speeds and when walking. It is technically easier to run in snowshoes than to walk in them, simply because the stride and distance between foot plants is longer when running. Even when running, though, an athlete's stride may be too short to allow clearance.

Conditions that may result in snowshoe overlap:

1. Athletes with shorter legs
2. Deeper or looser snow
3. Uphill slopes
4. Fatigue
5. Toes do not point straight ahead when walking
6. The first few steps to accelerate from a stationary position are too short
7. Improper foot placement on snowshoe

Experienced snowshoers recognize these conditions and apply a simple technique to compensate: spreading the feet farther apart to avoid overlap. It does not take much, as you only need about five or six inches between the feet to clear eight-inch-wide snowshoes. Most people walk or run biomechanically best with one foot planted in front of the other. Some athletes must focus on spreading the snowshoes apart constantly to move at all.

Skill Progression – Avoiding Snowshoe Overlap

Your Athlete Can	Never	Sometimes	Often
Walk without stepping on other snowshoe	☐	☐	☐
Accelerate to a jog without stepping on other snowshoe	☐	☐	☐
Totals			

Teaching Points

1. Ensure foot is placed properly in snowshoe.
2. Demonstrate what can happen with overlap.
3. Explain conditions that might result in a shorter stride.
4. Move with snowshoes spread just far enough apart.
5. Show athletes tracks in soft snow that exhibit just enough clearance.
6. Show how stride length varies by looking at tracks upon starting, going up a hill, in deep snow and with fatigue.
7. Expose athletes to conditions and practice.

Faults & Fixes – Avoiding Snowshoe Overlap

Error	Correction	Drill Reference
Athlete steps on snowshoe	• Spread feet slightly wider apart • Increase stride length	Trail Making Drill – having athletes follow in coach footsteps. Have different athletes lead the trail making
Athlete trips and falls	• Spread feet slightly wider apart • Increase stride length	Follow coach in same tracks Snowball Game

Stopping

Many athletes may have a fear of slick snow that resulted in a fall or an unpleasant experience with a sliding sport (skating, skiing) because stopping required a skill they did not have. You may not see this until the snowshoers come to the top of their first hill and freeze, refusing to descend.

Stopping is the same as when stopping while running or walking without snowshoes. Athlete must de-accelerate if they are moving fast by taking gradually smaller steps/strides until they can just cease taking any further steps.

Skill Progression – Stopping

Your Athlete Can	Never	Sometimes	Often
Gradually decrease stride length and rate over distance	☐	☐	☐
Stop without losing balance	☐	☐	☐
Stop without assistance	☐	☐	☐
Totals			

Teaching Points

1. Gradually, over a few strides, decrease stride length and rate.
2. Teach athlete to keep weight forward, off of tails of snowshoes.
3. Teach athlete not to use other object to stop.
4. Gradually slow down; don't stop abruptly.
5. Show athlete that a snowshoe does not slide like a ski.

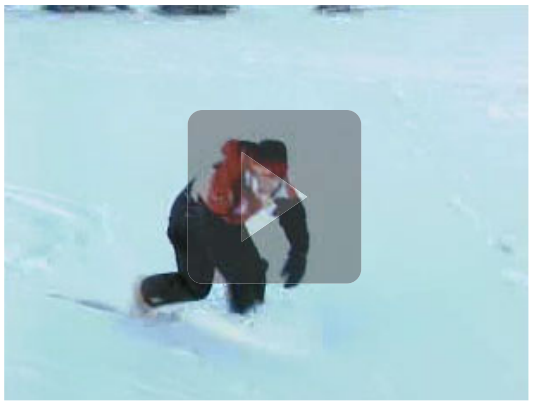
Faults & Fixes – Stopping

Error	Correction	Drill Reference
Athlete keeps running	Explain to athlete when to stop	Stop on whistle or command (Stop and Go Drill) Ghostbusters Game
Athlete trips or falls	Athlete should be gradually decreasing steps and speed	Practice proper stopping technique Ghostbusters Game
Athlete leans too far back	Point toes down	Toe walks

Falling

Before you begin the on-snow portion, it is important to teach your athlete the proper way to fall. Falls are a natural part of snowshoeing and falling in the correct way can prevent injury. Take some time to talk to your athlete, letting them know that it is OK for a fall to occur. By practicing falling an athlete will become less apprehensive if a fall does occur. Be sure that the athlete also has all of the proper protective equipment prior to practicing falls.

90% of the injuries from falling in snowshoeing are to the wrist and shoulder. Most of these injuries happen when a snowboarder falls forward in the incorrect way. Practice these movements side by side with your athlete. Start on your knees and let yourself fall forward onto your forearms. Catch your weight with the forearms away from the body slightly with the elbows bent (picture of starting and falling positions). Allow your forearms to touch the ground first. Try to resist reaching out toward the ground, or placing the hands out in front. As contact is made, absorb the fall with your arms. You may want to practice this movement with your athlete until he or she is completely comfortable with the movement.



Skill Progression – Falling

Your Athlete Can	Never	Sometimes	Often
Fall safely	☐	☐	☐
Be aware of arm and hand placement when falling	☐	☐	☐
Totals			

Teaching Points

1. Emphasize that falling can be safe.
2. Emphasize keeping elbows bent and close to body when falling.
3. Teach athlete how to tuck and roll (roll on shoulder).
4. Make sure the athlete is not physically injured.

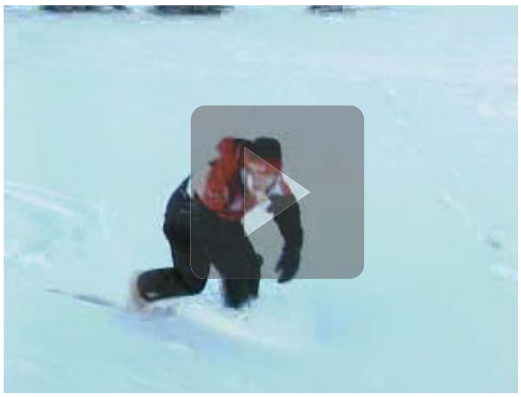
Faults & Fixes – Falling

Error	Correction	Drill Reference
Athlete does not fall correctly	Teach athlete how to fall	Fall on command while running
Athlete falls with arms extended	Teach athlete to keep elbows bent and close to body	Fall on command while stationary

Getting Up

Because falling can be a common issue in snowshoeing, it is important to teach the athlete how to get up from the snow. Many times this can be more frustrating than the fall itself, especially on an incline. The easiest way for a snowshoer to get up is to rise from a kneeling position where the athlete can then slowly rise to a standing position.

Even an athlete in good condition may have problems getting up from a fall. It is important to work until the athlete is comfortable with this task. During lessons, it is a good idea to have the athlete practice getting up if he or she falls. It is also important to make sure that the athlete isn't becoming over tired from having to get up too often. In this case you may want to offer more assistance.



Skill Progression – Getting Up

Your Athlete Can	Never	Sometimes	Often
Get up correctly	☐	☐	☐
Get up in a reasonable amount of time	☐	☐	☐
Totals			

Teaching Points

1. If athlete falls completely to ground, roll onto side.
2. Get up to the hands and knees.
3. Raise one knee and set the shoe flat on the snow.
4. Plant poles (if using poles) in front and stand up.
5. Without poles, the athlete may plant hands on one knee for a boost, if necessary, to regain standing position.
6. Make sure the athlete is not physically injured.

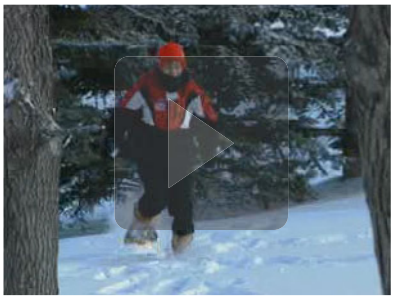
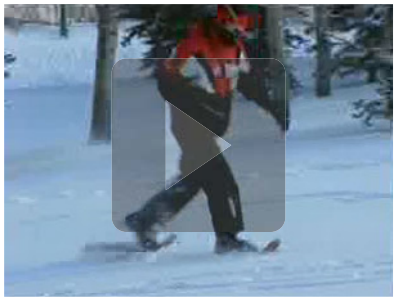
Faults & Fixes – Getting Up

Error	Correction	Drill Reference
Athlete does not get up	Make sure athlete works through steps	Steps to getting up
Athlete does not get up correctly	Reinforce steps to getting up	Steps to getting up
Snowshoes are not pointed in same direction	Point snowshoes in same direction	Reinforce snowshoe direction correction
Snowshoe comes loose or falls off	Replace snowshoes	Snowshoes on correctly
Athlete takes too long getting up	Reinforce time restraint	Timed getting up

Turning

Turning on snowshoes is as easy as turning when walking or running without them, as long as the turn is not too sharp and the speed is not too high. Simply make each successive step a bit farther to the side in the direction the athlete wants to go.

At high speeds or on sharp (90 degrees or greater) turns, some snowshoes may slip sideways, as most snowshoes do not "edge" well. In these situations, the athlete must plant the snowshoe flat on the snow, not angling it into the snow. The tendency is to allow the snowshoe to make contact with the snow at an angle when one leans the rest of the body into a sharp turn or at high speeds to maintain balance. To counteract this, athletes should concentrate on landing on the balls of their feet (on front claws) and not angling the snowshoe.

Skill Progression – Turning

Your Athlete Can	Never	Sometimes	Often
Take successive steps to the side	☐	☐	☐
Keep snowshoe flat and balanced	☐	☐	☐
Turn without causing overlap on tips or tails	☐	☐	☐
Totals			

Teaching Points

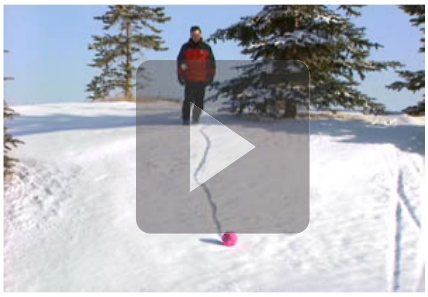
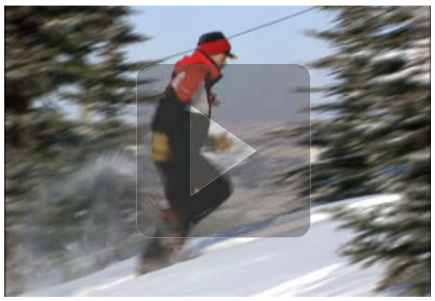
1. Teach athletes to take successive steps to the side.
2. Teach athletes to land on the balls of their feet with the snowshoe flat on the snow.
3. Teach athletes not to cause overlap on tips and tails of their snowshoes.
4. Teach athletes not to back up in snowshoes, but to take small steps when making a 180-degree turn.

Faults & Fixes – Turning

Error	Correction	Drill Reference
Athlete can only turn in one direction	Teach athlete how to turn in the other direction	Practice opposite direction turning Snowball Game – place snowballs in a circle and have them go the other direction
Athlete takes a large area to make a turn	Teach athlete to take smaller successive steps	Set up pylons to reinforce correct turn Snowball Game - place snowballs close together and have them in a pattern to encourage small turns
Overlap occurs when turning	Teach athlete to increase number of steps and reduce the angle of step	Practice turning Snow Write Drill
Athlete leans too far back	Point toes down	Toe walks
Athlete attempts to back up	Teach athlete not to back up	Set up pylons to reinforce correct turn

Climbing Hills

The ability to go up a hill is a facet of the sport that makes snowshoeing fun. Snowshoeing is the fastest and easiest way to go up snow-covered hills using one's own power. There are many different ways to go uphill depending on the snow conditions and size of the hill. All techniques can be accomplished on either snow or sand.


Skill Progression – Climbing Hills

Your Athlete Can	Never	Sometimes	Often
Take shorter steps	☐	☐	☐
Avoid snowshoe overlap	☐	☐	☐
Keep weight forward and on balls of feet	☐	☐	☐
Climb hills without slipping or falling	☐	☐	☐
Climb up moderate hills without using hands	☐	☐	☐
Pump arms to power up the hill	☐	☐	☐
Use the fall line, if necessary	☐	☐	☐
Identify the fall line, if necessary	☐	☐	☐
Totals			

Teaching Points

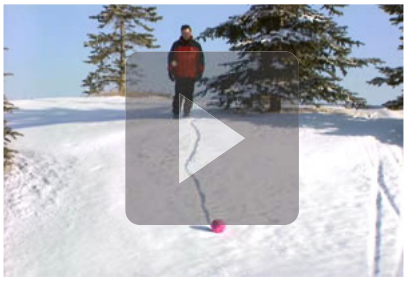
1. Show the athlete where the fall line is (the line a ball would take as it rolls down the hill).
2. The fall line is usually the most direct route possible up a hill.
3. Take shorter steps, keeping the head up.
4. Keep weight on the balls of the feet.
5. Keep feet spread apart to avoid overlapping snowshoes.
6. Stamp with the toe to dig the crampon into the snow for better traction.
7. Pump arms to power up the hill.
8. Lean slightly into the hill.
9. On short steep hills with loose or deep snow, crawling forward using the hands for balance and traction can help.

Faults & Fixes – Climbing Hills

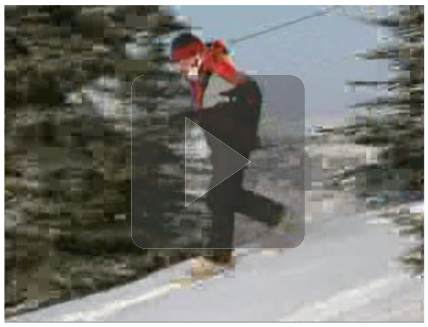
Error	Correction	Drill Reference
Athlete stops at bottom of hill	Teach athlete to maintain momentum	Repetition Stomp Drill on slight hill
Athlete slips backward	Teach athlete to lean forward	Repetition Stomp Drill on slight hill
Overlap occurs	Spread feet farther apart	Follow coach in same tracks Trail Making Drill Snow Write Drill
Athlete crawls up the hill	Teach athlete to stand upright	Have athlete hold items in both hands
Athlete takes circular route	Teach fall line	• Follow coach in same tracks • Roll ball down hill to emphasize fall line Trail Making Drill Fox Chase Game
Athlete takes extended steps	Teach athlete to take smaller steps	Snowball Drill

Descending Hills

Descending hills can be done safely using the proper techniques.







Skill Progression – Descending Hills

Your Athlete Can	Never	Sometimes	Often
Keep weight forward and on balls of feet	☐	☐	☐
Maintain traction	☐	☐	☐
Maintain balance	☐	☐	☐
Keep knees slightly bent	☐	☐	☐
Avoid overlap	☐	☐	☐
Run down the hill	☐	☐	☐
Use the fall line, if necessary	☐	☐	☐
Identify the fall line, if necessary	☐	☐	☐
Totals			

Teaching Points

1. Do not lean back.
2. Try to keep the upper body perpendicular to the slope, and point the toes down to maintain traction.
3. Extend arms out to help maintain balance.
4. Keep knees bent to cushion the impact.
5. It is easiest to run down a hill to get maximum traction and prevent snowshoe overlap, and it is important to do this on icy slopes.
6. It is easier to go straight down the fall line of packed snow hills than to traverse across slopes.
7. Avoid over striding. Brake and slow down by not leaning forward as much and taking shorter, quicker strides.

Faults & Fixes – Descending Hills

Error	Correction	Drill Reference
Athlete stops at top of hill	Teach athlete to maintain momentum	Repetition Stomp Drill
Athlete leans backward	Teach athlete to lean forward	Repetition
Overlap occurs	Spread feet farther apart	Follow coach in same tracks Trail Making Drill
Athlete does not bend knees	Teach athlete to bend knees	Bounding and Hopping
Athlete sits and slides down hill	Teach athlete to stand upright	Repetition
Athlete takes circular route	Teach fall line	• Follow coach in same tracks • Roll ball down hill to emphasize fall line Trail Making Drill Fox Chase Game
Athlete takes improper stride lengths	Teach athlete to take smaller or larger steps	Snowball Drill

Sprint Starts

A good start can make all the difference in a sprint because the athletes want to get out at the start of the race strong and fast.

In a sprint start, the athlete puts the "power foot" forward for a strong launch. Determining the power foot can be easily accomplished by having the athlete pretend to kick a ball. The foot that is used to kick the ball is the back foot. The foot that is used to support the body is the front foot, the power foot. Another way to determine the power foot is to stand behind the athlete and give a little nudge. The foot that the athlete steps out with is the back foot for the start.

Skill Progression – Sprint Starts

Your Athlete Can	Never	Sometimes	Often
Identify start line	☐	☐	☐
Position snowshoes correctly behind start line	☐	☐	☐
Identify proper leg placement with power leg (front leg) forward	☐	☐	☐
Understand "Start" commands	☐	☐	☐
Lean forward slightly at hips and bend front knee slightly	☐	☐	☐
Position arms correctly	☐	☐	☐
Maintain start position with minimal movement	☐	☐	☐
Drive back leg forward	☐	☐	☐
Push off with front foot	☐	☐	☐
Stay low, using arms to drive the body	☐	☐	☐
Take wider steps to avoid overlap	☐	☐	☐
Transition through acceleration phase	☐	☐	☐
Totals			

Teaching Points

At Start Line

1. Stand behind start line, relaxed, with power leg in front and tips of snowshoes behind line.

"Ready" Command

2. Lean forward slightly at hips and bend front knee slightly (about 120 degrees), placing weight on ball of front foot.
3. Hold opposite arm, from front foot, flexed in front of body.
4. Hold other arm back slightly past the hip and bent.
5. Stand as still as possible.

"Go" Command

6. Drive back leg forward, leading with knee, swinging front arm back.
7. Push strongly off ball of front foot, swinging the back arm forward forcefully.
8. Stay low, using arms to drive body forward.
9. Take wider steps when leaving the start line to avoid overlapping snowshoes.

Acceleration to Top Speed

10. Use short, quick steps off the start line, allowing stride to increase in length as velocity increases.
11. Gradually transition to a more upright sprinting position.

Faults & Fixes – Sprint Starts

Error	Correction	Drill Reference
When gun goes off, athlete stands upright	• Focus on first 2-3 strides • Keep low	Mark spot on track about 2-3 M in front of athletes for them to focus on.
Front leg is not bent properly	Bend front knee and lean forward	Observation
Arms incorrectly positioned	Move arms into correct position	Observation
Drive off start line is not explosive	Athlete's forward leg needs to forcefully push against snow	One-foot takeoff launch Ghostbusters Game
Athlete slips at start	Reinforce correct snowshoe position and push off	Observation Stomp Drill
Athlete trips or falls	Avoid snowshoe overlap by taking wider steps	Observation
Athlete loses balance	• Smaller steps • Come out of lean sooner	Balance drills Snow Write Drill
Athlete lifts head too soon or not soon enough	Adjust timing of when athlete lifts head	Mark spot on track to have athlete look at until time to lift head
Athlete doesn't accelerate to top speed	Use short quick steps moving to longer strides to increase velocity	Snowball Drill

Sprinting

Sprinting is the art of running as fast as possible. Sprinting happens when an athlete's legs move faster to propel them forward at a greater rate of speed. Sprinting is when more steps are taken and/or longer steps are taken. Sprinting is a mechanical body action that can be refined as the athlete gets more comfortable.




Skill Progression – Sprinting

Your Athlete Can	Never	Sometimes	Often
Maintain erect position	☐	☐	☐
Push off snow with balls of feet	☐	☐	☐
Move foot backward under body upon landing	☐	☐	☐
Drive knees up so thigh is horizontal	☐	☐	☐
Maintain upright posture with slight forward body lean from ground, not from waist	☐	☐	☐
Swing arms forward and back without rotating shoulders	☐	☐	☐
Sprint under control for entire race	☐	☐	☐
Totals			

Teaching Points

1. Run in an upright position so the maximum distance is attained with each stride.
2. The forearm and upper arm should form a 90-degree angle at the elbow.
3. Pump the arms (forward and back) with every stride.
4. The arm and leg movements should be synchronized. Move the right arm forward as left leg goes forward.
5. Increasing stride length or stride rate or both will increase speed.
6. Stay in lanes (25m, 50m and 100m). For other races, athletes need to keep moving forward toward the inside lane of track.

What is the body doing while you are sprinting?

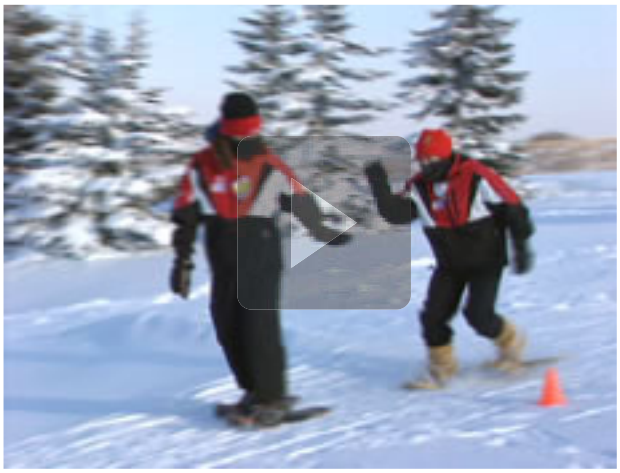
Head	Straight ahead with eyes focused on the finish Relaxed jaw and facial muscles
Shoulders	Relaxed and square with little or no rotation
Hands	Clasped, not tightly, with the thumbs up
Arms	Used for balance Drive up and out and do not cross the body
Feet	The toes are straight ahead

Faults & Fixes – Sprinting

Error	Correction	Drill Reference
Arms and shoulders twist and rotate	Keep torso facing in the direction the athlete is running	Running on the spot
Athlete not running in upright position	Fully extend stride	Bounding and strides
Athlete is very tense with fists clenched and upper body rigid	Practice running relaxed, with proper breathing	Break down running motion and try to break pattern Relay Drills
Head moves side to side	Keep head from moving, eyes forward	Focus on the finish line or in the distance
Runs too slowly	Increase stride rate or frequency	Fast leg drill and bounding Downhill sprinting Rabbits and Hounds Drill Sharks and Minnows Drill

Relay Races

Relay races are the 'team' events in snowshoeing. It is the art of running as fast as possible while making a successful connection with the next runner on your team. Relays develop a camaraderie and sense of team. Relay teams consists of four teammates who proceed around the track in order. To make a successful 'tag' (or 'exchange'), the racers have to stay in a set zone while the incoming runner tags the hand of the outgoing runner.



Skill Progression – Relay Races

Your Athlete Can	Never	Sometimes	Often
Identify teammates	☐	☐	☐
Identify start line	☐	☐	☐
Identify exchange zone	☐	☐	☐
Identify if tag has been made	☐	☐	☐
Remain in the exchange zone during tag	☐	☐	☐
Safely move off the track	☐	☐	☐
Totals			

Teaching Points

1. Receiving athlete is positioned in exchange area a few meters in from the start of the exchange area.
2. Receiving athlete is standing in ready position with body slightly turned, arm extended to the side and back, with palm facing up.
3. Receiving athlete watches for approaching teammate.
4. Receiving athlete starts to move forward when approaching athlete reaches the exchange zone or a predetermined point.
5. Approaching teammate runs up to extended-arm side of receiving athlete and tags the hand of the receiving athlete.
6. Receiving athlete runs to next exchange zone.
7. Approaching athlete continues to move in a straight line until coming to a gradual stop.
8. Approaching athlete turns to look that there are no other approaching athletes. When track is clear, proceed off track into the infield area.

Faults & Fixes – Relay Races

Error	Correction	Drill Reference
Approaching athlete tags competitor	Approaching athlete identifies correct team member	Recognition drills Rabbits and Hounds Drill
Exchange made outside zone	Reposition athletes; receiving athlete may need to start later	Practice
Approaching athlete has difficulty making tag	Receiving athlete extends and holds hand still	Practice Strengthen arm
Athlete impedes other snowshoers when leaving track	Slow down gradually, continue forward, check track before leaving	Simulate situation and practice correct movement off track Fox Chase drill

Distance Snowshoeing

These are the longer races that really test an athlete's endurance. It combines cardiovascular endurance and endurance to elements such as wind and cold, if training and race conditions are not perfect. These events require specific training to ensure that athletes have the endurance to train and compete at the longer distance and not be at risk for injury.

Skill Progression – Distance Snowshoeing

Distance running is a skill of aerobic endurance.

Your Athlete Can	Never	Sometimes	Often
Run longer distances	☐	☐	☐
Understand the concept of pace	☐	☐	☐
Pace themselves	☐	☐	☐
Keep tall in an upright position	☐	☐	☐
Maintain position through race duration	☐	☐	☐
Maintain controlled relaxed arm movement	☐	☐	☐
Keep shoulders not hunched and elbows tucked in	☐	☐	☐
Keep body relaxed	☐	☐	☐
Totals			

Teaching Points

1. Keep tall, in an upright position.
2. Have controlled relaxed arm movement.
3. Keep shoulders not hunched and elbows tucked in
4. Try to maintain same speed throughout the entire distance of the race.
5. Keep body relaxed.
6. Appropriate aerobic conditioning is required – athletes should increase duration first, then intensity, to improve conditioning.

Faults & Fixes – Distance Snowshoeing

Error	Correction	Drill Reference
Runner is leaning back	Stand tall, look forward	Bounding and strides
Runner appears to be bobbing up and down	Keep body relaxed; keep eyes forward	Observation Relay Drills
Upper body is twisting	Keep torso facing toward direction athlete is running	Running on the spot
Athlete is very tense with fists clenched and upper body rigid	Practice running relaxed, with proper breathing	Break down running motion and try to break pattern Rabbits and Hounds Drill
Uneven speeds during race	Pace during race	Fartlek training, timing laps

Waterfall Start

For events involving a turn, 200 meters and up and the relays, a curved "waterfall" starting line is used so that all snowshoers in all lanes of the track cover an equal distance to a point at the start of the first turn. Snowshoers are lined up starting from the inside lane or lane 1. This lane is reserved for the quickest athlete.

Skill Progression – Waterfall Start

Your Athlete Can	Never	Sometimes	Often
Recognize the curved starting line and proper positioning at the line	☐	☐	☐
Recognize the shortest path to the first corner	☐	☐	☐
Maintain a direct path to the first corner while being aware of other snowshoers and potential collisions and/or blocking situations	☐	☐	☐
Totals			

Teaching Points

1. Snowshoers should have a good understanding of starting and passing skills, as both will be required.
2. Snowshoers should position themselves at the start line so that they are pointed toward their target point at the first corner.
3. The target point should be the last point along the inside edge of the track visible to an athlete positioned at the start line.
4. Snowshoers need to judge the minimum distance to the athlete(s) ahead and beside them to avoid collisions and blocking.

Following the race start, the snowshoer should take the shortest path to the target point based on the position relative to other snowshoers. Passing can occur during this section but generally requires the athlete to pass on the right. This results in a longer path which may warrant the snowshoer waiting to pass on the straight to minimize the distance covered to accomplish the pass.

Pacing

One of the most difficult advanced skills to learn for a snowshoer is proper pacing. It is more efficient and faster to maintain a constant speed during all segments of a race than to move at an uneven pace. Proper pacing is especially important in longer distance races of 800 meters and above. Depending on the skill and ability level of the athlete, pacing can become important in races as short as 100 meters.

It is sometimes difficult for an athlete to apply the concept of proper pacing, as typically many other athletes in a race will not run with proper pacing. Most athletes start too fast for their aerobic and physical ability, slow dramatically in the middle, and then sprint to the finish. After all the basic skills of snowshoeing have been mastered, improvement essentially comes down to practicing to improve fitness and conditioning so that the athlete can maintain a faster pace throughout the race until the finish.

Skill Progression – Pacing

Your Athlete Can	Never	Sometimes	Often
Snowshoe at different speeds	☐	☐	☐
Distinguish the difference between snowshoeing at different speeds	☐	☐	☐
Maintain a consistent speed while snowshoeing over 100 to 400 meters	☐	☐	☐
Distinguish the difference in effort when snowshoeing at different speeds	☐	☐	☐
Maintain a consistent speed for half to 3/4 of the race distance	☐	☐	☐
Maintain or increase race pace in the last 1/4 of the race, even as fatigue sets in	☐	☐	☐
Totals			

Teaching Points

1. Make sure your snowshoers can actually move at different speeds and can do this independent of others. It may help if you or someone else initially snowshoes along with your athletes to show them different speeds and paces, but realize that the athletes must eventually learn to do this on their own.
2. Emphasize that it is not always the athlete who starts the fastest who wins a longer race.
3. Inexperienced athletes usually start longer races at the pace of the fastest starter, and then as they go into oxygen debt, everyone slows down except the fittest athlete. All others must slow until they recover (which they never completely do) and then start moving faster again at their own individual threshold pace. This is a very painful and inefficient way to run a long race.
4. Emphasize that a consistent pace and speed over the entire race is what usually produces the fastest times. The effort required to maintain a high even pace will increase as fatigue accumulates. An analogy is that over 50% of the effort is used in the last 25 % of the race.
5. Athletes need to run their own best race and pace for the first part of a longer race, and then focus on actually racing other athletes later in the race. Emphasize that the skill at the beginning of a race is to run near their ideal even pace, and this may require letting other athletes get ahead.
6. Coaches should determine at what pace an athlete should move in an ideal even-paced race, or the "goal pace." Take the best time for an athlete for a given distance, and then divide that time by the number of segments of a shorter distance that goes into the longer distance evenly. This will give you a time-per-distance speed to strive for. The shorter distance is usually 100 or 200 meters for a 400-meter race, 200 or 400 meters for an 800 or 1600-meter race, and 400 or 1000 meters for the 5 K or 10 K.

7. An 800-meter runner with a best time of 4:00 should maintain a speed of 1 minute per 200 meters for an even paced race, as 800 divided by 200 equals four and 4 minutes divided by four equals 1 minute.
8. A 5 K runner with a best time of 32:00 should proceed at a pace of 6:24 per kilometer, or about 2:56 per 400-meter segment.
9. These goal pace/distance times are a key tool in allowing athletes to practice even pacing and are useful for athletes to gauge their progress in longer races, if they can take or get intermediate split times from their coaches. Good coaches follow every step of their athletes in longer races and record intermediate split times to analyze later.
10. A workout for distance snowshoers might consist of multiple repetitions over a known shorter distance at a speed equal to the pace they want to maintain for their entire distance, with rests in between. For example, a 1600-meter snowshoer with a best time of 10:00 minutes might do a workout of six times 400 meters at a speed of 2:30 per 400, and with a jog of 200 to 400 meters between each of the six repetitions.
11. As fitness improves, the athletes can increase the number of these repetitions and/or decrease the time/distance resting between them. Athletes can increase the speed when they improve their best time.
12. Coaches should be aware that athletes' best times for a distance may rapidly improve at first, once they learn to pace themselves properly. Goal pace is something that can change weekly/daily for a novice snowshoe athlete, but is more constant for experienced athletes.
13. Be aware that snow conditions, weather, hills and terrain may drastically affect the speed at which a snowshoer might travel in a race. Athletes should thus learn to eventually base their pacing more on effort than speed.

Faults & Fixes – Pacing

Error	Correction	Drill Reference
Athlete starts fast and slows dramatically	Start slower at goal pace, ignore other racers at start	Practice goal pace, have athletes of different abilities practice together but run their own goal paces for repetitions. Have athletes run two shorter practice race time trials: one where they run an even pace and another where they start significantly too fast over the first 25% and then slow to finish at the same time as the even paced race. Ask them which was easier. Fox Chase Drill
Athlete maintains goal pace and then slows	Start a little slower at adjusted slower goal pace and/or improve fitness	Adjust goal pace, and/or snowshoe more, to improve fitness and conditioning
Athlete maintains goal pace but then is out-sprinted at end	Increase pace slightly from start, start racing others farther away from the finish, improve conditioning for faster finishes	Practice by ending workouts with simulated sprint finishes, encourage athletes to race others at end Rabbits and Hounds Drill
Athlete starts slower than goal pace, then finishes strong	Try starting a little faster than goal pace, warm up properly	Have athletes run even-paced time trial over 3/4 of racing distance at a little faster than goal pace, to give them confidence they can do it

Passing

The ability to safely and effectively overtake and pass another snowshoer is a skill all snowshoers should understand and use. Snowshoeing is unique among Special Olympics winter sports in that most of the races involve a mass start and the athletes do not have to stay in lanes. Passing is a form of interaction among the groups of racers.

Skill Progression – Passing

Your Athlete Can	Never	Sometimes	Often
Snowshoe independently without following others	☐	☐	☐
Recognize when a pass is needed	☐	☐	☐
Identify a good spot on the course to pass	☐	☐	☐
Move to the correct side of snowshoer to be passed	☐	☐	☐
Move over sufficiently to pass without interference	☐	☐	☐
Pass snowshoer by accelerating slightly	☐	☐	☐
If moving in front of other snowshoer, determine with a glance when a two-stride lead is achieved	☐	☐	☐
Move in front of other snowshoer and continue race	☐	☐	☐
Totals			

Teaching Points

1. A pass is usually required when a faster snowshoer catches up to a slower snowshoer or a snowshoer who has fallen or stopped. Near the end of a race, it is sometimes wise to initiate a pass so that the snowshoer has a clear run at the finish in case the leading snowshoer slows.
2. Straight sections of the course or track are the best areas to pass. A snowshoer attempting to pass on the outside of a turn will have to cover more distance to pass, and thus will have to be moving significantly faster to make the pass successful. A snowshoer should be able to look ahead to see what is coming up on the course before starting a pass. If the course soon narrows, it may be best to wait until after that to initiate the pass.
3. Athletes should move to the side with sufficient space to pass, and to the side that will position them on the inside of the next turn, if possible. Generally, snowshoers on a track will keep to the left edge, and passes will have to be made on the right. It is possible to pass on the left side on a track if the snowshoer in front has strayed from the left side and the pass can be made quickly enough so that the passing snowshoer cannot be cut off by the snowshoer in front, who has the right of way.
4. Generally, you need to move at least 50 cm (20 inches) to the side of a snowshoer to pass. More is better as long as it does not significantly increase the distance to be covered.
5. Ideally a pass can be made without significant energy-wasting changes in pace. Usually, completing a pass involves a slight acceleration in order to compensate for attempts by the leading snowshoer to maintain the lead.
6. The extra length of snowshoes requires that passing snowshoers attain a greater lead before moving in front of the passed athlete than if they were walking/running without snowshoes on. A passing athlete needs to turn the head slightly to glance over in order to determine when he or she has a sufficient lead. Generally, a snowshoer needs to be a minimum of two strides or about 1.5 meters (4 1/2 feet) ahead to move in front without interfering.
7. After taking the lead, the passing athlete should resume his or her own race. This means moving toward the side of the course so as to be on the inside of the next turn. The passing athlete should not worry about those behind him or her on the course.

Faults & Fixes – Passing

Error	Correction	Drill Reference
Athlete is reluctant/afraid to pass	Pass	Explain passing, practice passing to build confidence Sharks and Minnows Drill
Athlete tries to pass on outside of a turn	Pass on straight areas	Explain longer distance covered on outside of turn, practice passing on straight
Athlete passes too closely	Pass with space	Show by example and practice Relay Drills
Athlete interferes by moving in front too soon	Move in front after two strides (1.5 meter lead)	Show athlete proper distance, practice passing and turning head to look
Athlete passes but stays wide after pass	Resume normal race	Explain and show to athletes that "the race is in front;" practice passing and resuming race

Finishing

Finishing a race requires the development of pacing skills and timing to allow the snowshoer the opportunity to maintain or even increase speed just before the finish line. Snowshoers who effectively use finishing skills can improve their final positions relative to other athletes who do not have the endurance or energy to apply the final "kick" to the finish line. In very close finishes, the snowshoer who applies the finishing lean may improve his or her final position. The snowshoer whose torso crosses the finish line first is scored higher.

Skill Progression – Finishing a Race

Your Athlete Can	Never	Sometimes	Often
Recognize the need for a finishing kick based on position relative to that of the other snowshoer	☐	☐	☐
Recognize the appropriate distance from the finish line to start the finishing kick	☐	☐	☐
Maintain or increase the pace to the finish line once the finishing kick has been started	☐	☐	☐
Lean into the finish line with the torso during very close finishes with other athletes	☐	☐	☐
Totals			

Teaching Points

1. The snowshoer should have a good understanding of pace and passing skills, as both will be required.
2. The snowshoer needs to judge the maximum distance to the athlete(s) ahead and the distance required to catch and pass the athlete(s). Sufficient distance to the finish line should be given for any challenges to the passing maneuver by the opposing snowshoer.
3. An allowance of a few meters for these challenges is usually sufficient. Risk of the snowshoer regaining the position increases if the finishing kick and pass are completed too early.
4. Sprinting events require the snowshoer to maintain speed and lean into the finish line with the torso as required in close competition. The athlete should be able to lean forward just enough to gain the advantage but not so far forward as to lose balance and fall forward or lose forward speed.
5. Distance events require the snowshoer to use an adequate race pace to maintain an acceptable recovery distance from the leading athlete.

Snowshoeing Games/ Drills

With a few modifications, almost any outdoor game can be played on snow. Popular chase and capture games work well. With imagination, the possibilities are endless. The games should suit the ability and ages of the athletes; races or technical games may be intimidating for beginners. The names of the games can be changed to make them more appropriate to the level of the athletes while maintaining the principles and skills. In most games, it is a good idea to play without poles. These games will help develop conditioning and coordination at any time of the year. These games are not intended to replace skill training but to enhance the training experience with some fun activities.

Rabbits and Hounds (could be called 'Chase Drill")

The "rabbits" are released into an open field wearing a streamer or ribbon. The "hounds" are released to chase down the rabbits and collect the ribbons as trophies. Switch roles and repeat the game. Which team can collect the most ribbons?

Relays

Teams of two racers take turns snowshoeing a loop and to each other. Incorporate a variety of terrains in the loops and increase the number of total loops per athlete over time. Variation: Practice snowshoe skills with the relays. For example, run to a designated point, remove and replace a snowshoe, then return.

Sharks and Minnows (could call it "Zone Tag")

"Minnows" line up on a beach (edge of a field or open area) with one "shark" in the ocean (middle of open area). The minnows try to snowshoe across the field without being tagged by the shark. The beaches are the safety zones. When a minnow is tagged, he or she becomes a shark. Continue the game until there is only one minnow left.

Ghostbusters (could be called "Freeze Tag")

Spread athletes randomly in a field or open area. Choose one person to be the "Ghostbuster" the others are the "ghosts." Anyone tagged by the ghostbuster becomes a stationary haunted house, arms and legs out to the sides. Haunted houses are freed when a ghost tags them or runs under their arms.

Fox Chase (could be called "Trail Chase")

One snowshoer or a group goes out snowshoeing with a head start, and the others later try to follow the trail by the tracks in the snow.

Snow Write

Have athletes try to write their names in big letters in the snow (using cursive style) by snowshoeing a trail, and then run back over it quickly.

Stomp

Athletes each get an area delineated by a line in the snow. Then they try to stomp down all the snow in the space. Bigger spaces should be given to more advanced athletes.

Trail Making

Given untracked snow four or more inches deep and some open land (a park, athletic field, or similar area), it is possible to design, create and maintain snowshoe trails simply by snowshoeing through untracked snow. You can delineate a route quickly and easily. This can be used for a number of games.

Snowball Drill

Coach places several snowballs on the ground. Then athletes try to stomp on all the snowballs. Can be used to develop skills based on how far apart the snowballs are placed.

The Cool-Down

The cool-down is as important as the warm-up; however, it is often ignored. Abruptly stopping an activity may cause pooling of the blood and slow the removal of waste products in the athlete's body. It may also cause cramps, soreness and other problems for athletes. The cool-down gradually reduces the body temperature and heart rate and speeds the recovery process before the next training session or competitive experience. The cool-down is also a good time for the coach and athlete to talk about the session or competition.

Activity	Purpose	Time (minimum)
Slow aerobic jog	Lowers body temperature and gradually reduces heart rate	5 minutes
Light stretching	Removes waste from muscles and increases range of motion	5 minutes

Modifications and Adaptations

In competition, it is important that the rules not be changed to suit athletes' special needs. There are, however, approved snowshoeing aids that do accommodate athletes' special needs and are permitted in the rules. Also, coaches can accommodate athletes' special needs by modifying the training exercises, communication method and sport equipment to assist athletes in achieving success.

Modifications

Modifying Exercises

Modify the skills involved in an exercise so that all athletes can participate.

Accommodating an Athlete's Special Needs

Use the sound of a bell for visually impaired athletes.

Modifying Your Communication Method

Different athletes require different communications systems. For example, some athletes learn and respond better to demonstrated exercises, whereas others require greater verbal communication. Some athletes may need a combination: to see, hear and even read a description of the exercise or skill.

Modifying Equipment

Successful participation for some athletes requires equipment modifications to suit their particular need.

Adaptations

More specific adaptations for snowshoeing are listed below.

Orthopedic Impairments

Have courses marked by flags and/or fencing.

Auditory Impairments

Use flag or hand signals for start.

Visual Impairments

1. Use brightly colored equipment.
2. Use the sound of a bell for visually impaired athletes.

Cross Training in Snowshoeing

Cross training is a modern-day term that refers to the substitution of skills other than the skills directly involved in the performance of the sport. Cross training is mostly used in injury rehabilitation and is now used in injury prevention as well. When athletes sustain injuries in the legs or feet that keep them from training or competing, other activities can be substituted to keep up their aerobic and muscular strength. Cross training for athletes comes in the form of swimming pool workouts, bicycling and athletics.

There is a limited value and crossover to this specific exercise. A reason to "cross train" is to avoid injury and maintain muscular balance during a period of intense sport specific training. One of the keys to success in sports is staying healthy and training over the long haul. Cycling is not the same as snowshoeing. But if cycling takes the pressure off shins, knees and hips on a recovery steady-state day, then it will probably make the next snowshoeing workout better. Why? Because it keeps athletes injury-free and snowshoeing. Cross training allows athletes to do event-specific training workouts with greater enthusiasm and intensity and minimal risk of injury.

Swimming Pool Workouts

Have athlete swim or perform running actions in the pool. Have athlete swim at a steady state for a minimum of 2 minutes. Using a flotation vest or inner tube, have athlete perform running actions while in an upright position. Use intervals of 30 to 120 seconds with 2:1 rest.

Bicycle Workouts

Have athlete ride a bicycle as interval and steady-state workouts. The athlete works out on a stationary bike or spinning bike doing aerobic and anaerobic workouts. The athlete rides an outdoor bike for 20 minutes to 1 hour at various paces.

Summer Sport Cross Training

Athletics

Athletics is a great sport for training and competing during the winter/spring/summer season. Several of the basic principles, such as mechanics of running and energy systems, are common between snowshoeing and athletics. Athletics and snowshoeing also share some principles in how their events and competitions are set up.

SNOWSHOEING COACHING GUIDE

Snowshoeing Rules, Protocol & Etiquette

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Teaching the Rules of Snowshoeing

The best time to teach the rules of snowshoeing is during practice. Please refer to the official *Special Olympics Sports Rules* for the complete listing of snowshoeing rules. As coach, it is your responsibility to know and understand the rules of the game. It is equally important to teach your athletes the rules and to make them play within the spirit of the game. Below are selected laws of the sport of snowshoeing. Maintain current copies of the official *Special Olympics Sports Rules* and your national and/or international federation snowshoeing rulebooks. Know the differences and carry these rulebooks to every game.

Divisioning

It is important that you as a coach learn and understand the rules and procedures of divisioning before attending competitions. Understanding the divisioning process will have a direct impact on your athletes' performance. The fundamental difference between Special Olympics competitions and those of other sports organizations is that athletes of all ability levels are encouraged to participate, and every athlete is recognized for his/her performance. Competitions are structured so that athletes compete with other athletes of similar ability in equitable divisions. Historically, Special Olympics has suggested that all divisions be created so that the variance between the highest and lowest scores within that division does not differ by more than 10 percent. This 10 percent statement is not a rule but should be used as a guideline for establishing equitable divisions when the number of athletes competing is appropriate.

Coaches are critical in helping competition management teams make divisioning work. Divisioning works best when coaches submit preliminary scores. This helps athletes get into the proper division as well as gain additional competition experience.

How Divisioning is Implemented

An athlete's ability is the primary factor in divisioning Special Olympics competitions. The ability of an athlete or team is determined by an entry score from a prior competition or the result of a seeding round or preliminary event at the competition itself. Other factors that are significant in establishing competitive divisions are age and sex.

Ideally, competition is enhanced when each division accommodates three to eight competitors or teams of similar ability. In some cases, the number of athletes or teams within a competition will be insufficient to achieve this goal. The following describes the sequential process for creating equitable divisions.

Unified Sports® Rules

There are few differences in the rules for Special Olympics Unified Sports® competition as the rules are stipulated in the official *Special Olympics Sports Rules* and modifications are outlined in the rules book. The additions are highlighted below.

1. A roster consists of a proportionate numbers of athletes and partners.
2. For snowshoeing, a Unified Sports team consists of two athletes and two partners of equal ability competing in the 4 x 100 and the 4 x 400 relay events.

Protest Procedures

Protest procedures are governed by the rules of competition and may change from competition to competition. Only rules violations can be protested. Judgment calls made by officials or divisioning decisions cannot be protested. The protest must site specific violations from the rulebook and a clear definition of why the coach feels the rule was not followed.

The role of the competition management team is to enforce the rules. As a coach, your duty to your athletes and team is to protest any action or events while your athletes are competing that you think violated the Official Snowshoeing Rules. It is extremely important that you do not make protests because you and your athlete did not get your desired outcome of an event. Filing a protest is a serious matter that can impact a competition's schedule. Check with the competition team prior to a competition to learn the protest procedures for that competition.

Snowshoeing Protocol and Etiquette

Courtesy and Safety While Snowshoeing

- Do not snowshoe too close to other athletes.
- Be careful not to step on the tail of another athlete's snowshoes.
- Get out of the way as quickly as possible if there is a fall.
- Do not cross in front of other moving athletes.
- Remember that the faster snowshoer has the responsibility to warn another snowshoer or skier when overtaking him or her.
- Fill up holes in the snow after falling.
- Give way to beginners.
- Do not hit others with equipment.
- Follow the rules of the facility that you are using; for example, stay off of trails not designated for snowshoeing.
- Remain on marked trails.
- Wear appropriate clothing.
- Always snowshoe with someone else.
- Do not wear snowshoes outside of the designated areas.
- When not using snowshoes, leave them in an appropriate area.

Rules of the Trails (If Using Trails)

1. Snowshoe in a controlled manner.
2. Proceed carefully when passing another snowshoer or skier.
3. Let the person in front know which side (left/right) when passing.
4. Yield the right of way when entering from a side trail.
5. Since snowshoes are easier to control and maneuver than skis or snowmobiles, it is suggested that snowshoers yield the right of way to all other trail users where trails are narrow.
6. Do not stop in a narrow place on the trail.
7. Do not block the trail when stopped.
8. Do not stop abruptly, especially in spots not visible to oncoming athletes.
9. Look before starting again; do not move out in front of others.

Signs

Since there are few snowshoeing-specific trails, and training and competition may take place at cross-country ski trails, teach the athletes the meaning of those signs.

Trail Markers

A standard marker for cross-country ski trails is the azure blue diamond. All ski area associations and most government agencies have adopted it. Some trails also are marked with numbers, symbols, letters and color-coded signs. For example, the trail difficulty signs include Green Circle for easiest trails, Blue Square for intermediate trails and Black Diamond for most difficult trails.

Relative Degree of Difficulty

Found on the trail board and trail map and at every trailhead, are signs that designate the degree of difficulty of a trail in the system. An example of ski area degree-of-difficulty signs is given above.

Cross Country Skier and Snowshoer

This sign is used to designate a trail as dedicated to either cross-country skiers or snowshoers. It is used at the trailhead, on the trails, at trail junctions and on printed information. Most trail systems will not indicate if they are dedicated to skiers or snowshoers.

Caution or Warning

These signs have both permanent and temporary use. The “Caution!” sign can be used temporarily to mark a spring washout or permanently to mark a steep downhill or busy intersection. The other warning signs are self-explanatory. Warning signs should be posted on the trail board, at the trailhead and, as required, on the trail.

Regulatory

The signs below are used to regulate the use of a trail. The “Trail Closed” sign should be used on the trail board and, when feasible, at the trailhead. Other regulatory signs, particularly the full season signs, such as “No Dogs” or “Dog Trail,” should be used on the trail board and map and at the trailhead. A ski area also may use rope or tape across the entrance of the trail or at a trail junction to signify that the trail is not to be used.

Sportsmanship

Good sportsmanship is both the coaches' and the athletes' commitment to fair play, ethical behavior and integrity. In perception and practice, sportsmanship is defined as those qualities which are characterized by generosity and genuine concern for others. Below we highlight a few focus points and ideas on how to teach and coach sportsmanship to your athletes. Lead by example.

Competitive Effort

- Put forth maximum effort during each event.
- Practice the skills with the same intensity as you would perform them in competition.
- Always finish a race or event: Never quit.

Fair Play at All Times

- Always comply with the rules.
- Demonstrate sportsmanship and fair play at all times.
- Respect the decision of the officials at all times.

Expectations of Coaches

1. Always set a good example for participants and fans to follow.
2. Instruct participants in proper sportsmanship responsibilities, and demand that they make sportsmanship and ethics the top priorities.
3. Respect judgment of contest officials, abide by rules of the event and display no behavior that could incite fans.
4. Treat opposing coaches, directors, participants and fans with respect.
5. Shake hands with officials and the opposing coach in public.
6. Develop and enforce penalties for participants who do not abide by sportsmanship standards.

Expectations of Athletes & Partners in Special Olympics Unified Sports®

1. Treat teammates with respect.
2. Encourage teammates when they make a mistake.
3. Treat opponents with respect: Shake hands prior to and after contests.
4. Respect judgment of contest officials, abide by rules of the contest and display no behavior that could incite fans.
5. Cooperate with officials, coaches or directors and fellow participants to conduct a fair contest.
6. Do not retaliate (verbally or physically) if the other team demonstrates poor behavior.
7. Accept seriously the responsibility and privilege of representing Special Olympics.
8. Define winning as doing your personal best.
9. Live up to the high standard of sportsmanship established by your coach.

Coaching Tips

- ❑ Discuss snowshoeing competition protocol such as congratulating opponent after all events, win or lose; and controlling temper and behavior at all times.
- ❑ Give recognition to athletes and assistant coaches.
- ❑ Always commend the athletes when they demonstrate sportsmanship.

Remember

- Sportsmanship is an attitude that is shown in how you and your athletes behave on the course or trail.
- Be positive about competing.
- Respect your opponents and yourself.
- Always stay under control even if you are feeling mad or angry.

Snowshoeing Glossary

Term	Definition
Binding	The part of a snowshoe that attaches the footwear to the snowshoe.
Carrying Surface	Surface area of a snowshoe; the larger the surface area, the more flotation and support for the snowshoer.
Crampon	The sharp pointed traction device that may be attached to a snowshoe's pivot hinge to prevent slippage. Generally made from heat-treated aluminum or tempered carbon steel.
Claw	Like a crampon but with comparatively short serrations. Claws are an angle traction device attached to snowshoes. They give a "grip" comparable to that provided by the webbing of traditional snowshoes and are used in conditions where ice or steep surfaces are not encountered.
Decking	Solid or webbed pieces of nylon, rawhide or rubber-like material attached to the snowshoe frame that provides flotation for the snowshoer.
Fall Line	Shortest distance down a slope. The direction perpendicular to the ground that an object (you, rock, snow) would fall.
Flotation	Ability of a snowshoe to limit sinking down into soft or deep snow.
Frame	The rigid outer structural component of a snowshoe, usually made of wood, plastic or metal.
Heel Strap	Part of the snowshoe binding that secures the heel. It is a strap that wraps around the back of the snowshoer's footwear.
Lamp Wick	A 1 ½-inch cotton woven cord (oil lamp cord) used for binding snowshoes.
Pivot Rod	Attaches to the frame and allows the foot and binding to rotate as the snowshoer moves forward.
Tail	The rear area of a snowshoe frame.
Tip or Toe	The front area of a snowshoe frame.
Toe Hole	The opening in the front decking that allows the forefoot to pivot through a complete range of motion.
Tuque	A knitted hat adorned with a tassel on the top, the traditional headgear for snowshoers.

SNOWSHOEING

Special Olympics Coaching Quick Start Guide

Special Olympics

February 2007

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Planning a Snowshoeing Training Season

It's important to start off the snowshoeing training season with a plan for the season. A training season plan must take into account the competition schedule and the development and preparation of the athletes for those competitions. Season plans consist of three components: Preseason, In-season and Postseason.

The training season plan should incorporate the components that will allow the athletes to reach or attain the goals that they set at the beginning of the season. The goals may vary widely and should thus be adaptable as practical to the individual athletes' goals, which may range from competition to a weekly workout.

Developing a Season Plan

The snowshoeing coach needs to prepare for the upcoming season. The list below offers some suggestions on getting started.

- Improve knowledge of snowshoeing and coaching skills by attending training sessions and clinics.
- Recruit assistant coaches.
- Locate a facility for practice sessions.
- Arrange for needed equipment.
- Recruit volunteers to transport the athletes to and from practice and/or competition.
- Recruit athletes.
- Ensure that all prospective snowshoeing athletes are registered Special Olympics athletes.
- Establish goals and draw up a training plan such as the one provided later in this guide.
- Try to schedule at least one training session per week.
- If possible, develop a home training program.

Preseason

Maintaining overall fitness during the spring, summer and fall is the best preparation for a snowshoeing season. A steady progression to build up strength and conditioning is best. Running is the best preparation for snowshoeing.

In-season

This is where the plan comes into action. Plan each practice session according to what needs to be accomplished. Training can be done on snow, sand or soft grass. Just because there is no snow, it doesn't mean that training cannot occur. A limited amount of training in snowshoes on these surfaces will not greatly damage the equipment and will help athletes familiarize themselves with the sport if no snow is present.

During the first practice, administer the Sports Skills Assessment Test and set the athletes' goals according to individual ability levels. Orient the athletes to the facility and their equipment. The goals and skills of the athletes should be monitored periodically throughout the season with modification to the training session to enable the athletes to meet their goals. As competition approaches, try to simulate race conditions for athletes. Relays are a good way to prepare the athletes for the excitement of racing and teamwork. If on-snow time is limited, emphasize conditions that simulate races or race pace as much as possible when you do get a chance to be on snow.

Postseason

Once the season is over, this is the time to thoroughly evaluate the athletes' progress against goals set and provide feedback to the athletes. Develop off-season training plans for those athletes who wish to train in the off-season. Off-season training plans should be consistent with the athletes' overall training goals.

Evaluate the training plan and make modifications for next year's season. Request feedback from athletes, assistant coaches, parents, etc., for use in modifying next year's training program.

Snowshoeing Training Session

Planning a Snowshoeing Training Session

Each training session needs to contain the same essential elements. The amount of time spent on each element will depend on the goal of the training session, the time of season the session is in and the amount of time available for a particular session. The following elements need to be included in the training session; however, times may vary depending on the specific requirements of the session.

The Warm-up	10-15 minutes
Specific Event Workout	15-20 minutes
Conditioning or Fitness Workout	15-20 minutes
The Cool-down	10-15 minutes

NOTE: Please refer to the Teaching Snowshoeing Skills Sections in each area for more in-depth information and guidance on these topics.

Principles of Effective Training Sessions

Keep all athletes active	Athlete needs to be an active listener
Create clear, concise goals	Learning improves when athletes know what is expected of them
Give clear, concise instructions	Demonstrate – increase accuracy of instruction
Record progress	You and your athletes chart progress together
Give positive feedback	Emphasize and reward things the athlete is doing well
Provide variety	Vary exercises – prevent boredom
Encourage enjoyment	Training and competition is fun; help keep it this way for you and your athletes
Create progressions	Learning is increased when information progresses from: • Known to unknown – discovering new things successfully • Simple to complex – seeing that "I" can do it • General to specific – this is why I am working so hard
Plan maximum use of resources	Use what you have and improvise for equipment that you do not have – think creatively
Allow for individual differences	Different athletes, different learning rates, different capacities

Weekly Home Training

Each athlete needs to recruit a partner who will train with him or her at home. This can be a sibling, parent or friend. The athlete and partner must push each other to make training effective.

Warm-Up Exercises	Instructions
Walking	Walk around in the snow for two minutes, and then jog in place for two minutes.
Arm Circles	Hold arms out to sides at shoulder height; make 15 small circles rotating arms forward. Rest, repeat arm circles by rotating arms backward 15 times.
Calf/Achilles Stretch	Stand facing a wall or fence with one leg in front of the other. Bend your forward leg slightly. Bend at the ankle of your back leg. Remember, you do not want to feel pain, only slight tension of the muscle stretching.
Push-Ups	Kneel down and place your hands on the ground in front of body, shoulder width apart. With a straight back, move your feet back behind you until you are on your toes. Your weight is on both your hands and feet. Slowly bend your arms until they are parallel to the ground. You chest will drop 4-5 inches from the ground. Push up to the starting position. Repeat five times. Try and work up to 10 or more. Remember to fully extend your arms in the start position, with a straight back. You can help keep a straight back by squeezing your stomach muscles.
Sit-Ups	Lie on your back with your knees bent. Your hands can be on your chest or shoulders or on the side with your fingers touching your ears. Your elbows are out to the side. Keep back straight as you slowly lift your shoulders, coming all the way up to a sitting position. Squeeze your stomach muscles as you slowly return to the start position. Repeat 10 times. Try and work up to two or three sets of 10. Rest for 30 seconds between sets. Remember, the wider apart the hands. the more the athlete works on the chest muscles.
Exercise for the Week (Exercise a minimum of 10 minutes)	
1. Set up a 10-meter course 2. Practice snowshoe starts 3. Race 10 times	Each week, increase the distance to 25 meters, then 50, then 100. Time each race to seek improvement. Practice putting on snowshoes, falling down and getting up. For distance snowshoers, jog at least two times a week in addition to regular training sessions.

Sample Training Program

Ideally, athletes need to train – compete – train – compete to achieve optimum benefits from sport participation. Your creativity is the key to helping athletes learn and enjoy themselves at the same time in both the training and competing environments. The following sample eight-week training program may help you to develop individualized training programs for your athletes. Please incorporate parts of this program as they meet the needs of your snowshoers.

Week One
1. Make introductions and do an overview of season schedule 2. Teach warm-up and stretching routines 3. Introduce basic snowshoeing skills 4. Play an active game 5. Cool down 6. Make closing remarks and distribute home training plan
Week Two
1. Warm-ups and stretches 2. Review previously taught skills 3. Administer Snowshoe Skills Assessment 4. Play a fun game 5. Cool-down and remarks
Week Three
1. Warm-ups and stretches 2. Review previously taught skills 3. Introduce new skills 4. Break athletes into skill groups for specific instruction 5. Play a short game or mini competition 6. Cool-down and remarks
Week Four
1. Warm-ups and stretches 2. Review previously taught skills 3. Introduce new skills 4. Break into skill groups 5. Go on a long-distance hike appropriate to various skill levels 6. Cool-down and remarks
Week Five
1. Warm-ups and stretches 2. Review previously taught skills 3. Introduce new skills 4. Break into skill groups 5. Practice sprint starts and speed races 6. Have a fun race 7. Cool-down and remarks

Week Six
1. Warm-ups and stretches 2. Review previously taught skills 3. Introduce new skills 4. Break into skill groups 5. Practice relay races or play a game 6. Cool-down and remarks
Week Seven
1. Warm-ups and stretches 2. Have a mini competition 3. Fitness training 4. Cool-down and remarks
Week Eight
1. Warm-ups and stretches 2. Work on weaknesses seen in mini competition 3. Play a fun game 4. Cool-down 5. Coordinate for upcoming event

Snowshoeing Skills Assessment

Athlete Name _____ **Start Date** _____

Coach Name _____

Instructions

1. Use tool at the beginning of the training/competition season to establish a basis of the athlete's starting skill level.
2. Have the athlete perform the skill several times.
3. If the athlete performs the skill correctly three out of five times, check the box next to the skill to indicate that the skill has been accomplished.
4. Schedule several Assessment Sessions into your program.
5. Snowshoers may accomplish skills in any order. Athletes have accomplished this list when all possible items have been achieved.

Stretching

☐ Knows stretches for calves, hamstrings, groin, quadriceps, triceps and shoulders

☐ Performs stretches

Dry Land or Inside Activity Warm-Ups

☐ Knows warm-up exercises

☐ Performs dry land warm-up exercises

☐ Performs on-snow exercises

Putting on Snowshoes

☐ Identifies parts of a snowshoe

☐ Identifies left and right snowshoes

☐ Positions foot properly

☐ Tightens straps securely

Removing Snowshoes

☐ Loosens straps and removes foot from shoe

Avoiding Snowshoe Overlap

☐ Stands on snowshoes without assistance

☐ Understands the concept of snowshoe overlap

☐ Spreads feet/snowshoes farther apart and moves them closer together

Walking Forward

☐ While walking, see if overlap occurs

Stopping and Recovery

☐ Stops intentionally

☐ Gets up without assistance

Turning

- ☐ Stands on one leg
- ☐ Takes long enough strides to avoid overlapping snowshoes
- ☐ Plants snowshoe flat on snow

Climbing Hills

- ☐ Ascends the most direct route on the hill
- ☐ Stamps with the toe to dig the cleat into the snow
- ☐ Uses arms to power up the hill

Descending Hills

- ☐ Keeps the weight forward
- ☐ Takes long striding, gliding steps, being careful not to over stride
- ☐ Identifies and goes down the fall line

Sprint Starts

- ☐ Stands upright with one leg in front, ready to start, with knees bent
- ☐ Thrusts upward with rear leg and forward pumping arms
- ☐ Uses the front leg as an anchor serving as the base for the thrust
- ☐ Performs the sprint start without falling

Sprinting

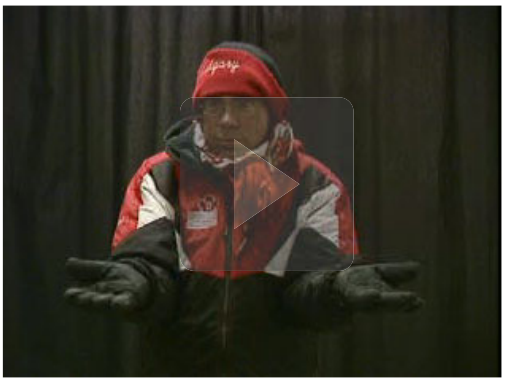
- ☐ Synchronizes arm and leg movements for maximum speed (right arm goes forward as left leg goes forward)
- ☐ Moves in a straight line

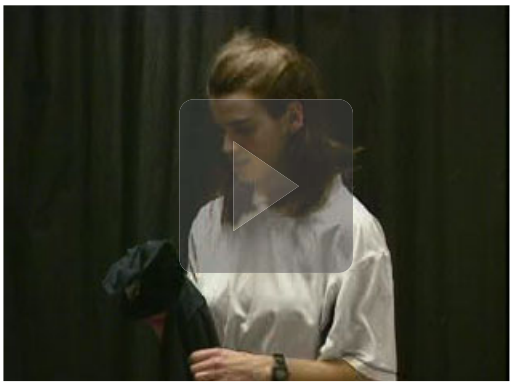
Distance Snowshoeing

- ☐ Breathes effectively
- ☐ Controls arms and keeps elbows in
- ☐ Runs by lifting the feet as little as possible
- ☐ Makes short strides to conserve energy
- ☐ Runs an even-paced race

Snowshoeing Attire

Clothing must be appropriate to the weather conditions. Incorporate the "25° F rule" when training and competing. This means that if the temperature outside is 40° F (4.4° C), dress as if it is 65° F (18.3° C). This is how warm you will feel from the heat generated by your workout. It is best to dress in layers so you can add or subtract clothes as needed. Always bring too many clothes instead of too few.





Socks

Socks are a personal preference, but it is suggested that a wool or blended-material ski or hiking sock be used for snowshoeing. Definitely avoid cotton socks because they absorb moisture, are poor insulators and will result in blisters. It is recommended that liner socks made of synthetic or natural fibers be worn underneath insulated socks. The liners will help wick away perspiration and moisture from the foot and add more insulation layers of air. The liners will also absorb the friction between the feet and outer socks to prevent blisters.

Footwear

Any type of shoe can be used. Running shoes and cross-training sneakers are popular because of their light weight and comfort. The heavier the shoe, the more weight the back will feel while running. Boots may be used in colder weather, but be sure that there is flexibility in the ankles and that the boot can remain securely attached to the foot while walking and running. The most important thing is to keep the feet dry and comfortable. It is recommended that the shoes fit comfortably with the socks that will be worn while snowshoeing. Booties that fit over the shoe and cover the space between the top of the shoe and the bottom of the pants are very useful. Neoprene cycling booties are great to use over running shoes.

The key in snowshoeing is that the boot or shoe is the interface with the snowshoe. The snowshoer's warmth comes from the exercise and layering, rather than bulky boots. Heavy boots will make it harder to snowshoe because they add weight. Additionally, they may cause excessive foot perspiration, which can lead to cold feet very quickly.

Mukluks or moccasins can be used in combination with a traditional wood snowshoe and binding. Mukluks or moccasins can have a crepe/ rubber sole and felt insert to provide protection. Mukluks are known for being warm, comfortable and lightweight. These typically provide a good interface with the snowshoe.

Pants and Tops

Incorporate the three-layer system. It's simple and it works well.

Inside Layer

The inside (or inner or base) layer is the wicking layer. Long underwear made of synthetic materials, natural materials (silk) or treated materials will remove perspiration from the body. Both the upper and lower body should be covered by a wicking layer. A shirt that covers the neck and fits snugly at the wrists is an effective way to conserve body heat.

Middle Layer

The middle layer should be an insulating layer and consist of wool (sweater or pants), fleece (top or bottom) or treated material. Synthetic insulations or phase change treatments have also proven to be lightweight but very effective. This layer provides warmth by trapping a layer of air around the body.

NOTE: Except in extremely cold conditions, the legs do not need and would be constricted by this layer.

Outer Layer

Wind and snow are blocked by the weatherproof outer layer. For the legs, nylon wind pants are good. If wind pants are not available, choose looser-fitting synthetic sweatpants. A lined windbreaker or warm-up jacket works well on top. Clothing that uses laminates that are waterproof, windproof and breathable (allowing perspiration to leave the body) can be useful. Be aware that absorbent clothing such as cotton sweatpants will provide little protection from the wind and cold. Snowshoes tend to kick up loose snow on the legs and back, and this is best shed by a slick and smooth nylon outer layer. Snowshoeing can be a highly aerobic activity that can generate a tremendous amount of heat and require clothing to allow unrestrictive movement.

Consider the ability of your athlete, the weather and the distance of the event when deciding upon clothing for competition. For optimal competition, strive to dress your athlete in clothing that is lightweight, breathable, layered and slick on the outer surface, and that allows unrestrictive movement. Consider having the athlete wear a thick, heavy, easily removed jacket and pants over everything to keep warm between events. At many competitions, the greatest challenge is staying warm while standing around between events. These bulky layers should have the ability to be easily and quickly removed and put back on before and after events. Do not neglect an extra set of warm, dry clothes to change into for athletes whose competition clothes will get wet with perspiration during longer races.

Accessories

Knitted hats are necessary to keep heat from escaping through the head. Gloves or mittens with the same three layers—synthetic base, thermal insulation layer and wind/waterproof outer layer—are needed according to weather conditions. Suitable eye protection is recommended to protect the eyes from damaging ultraviolet rays and glare and from snow kicked up by the snowshoes. Polarized sunglasses will cut glare, and high-quality glasses will be less likely to fog. Remember that if the glasses fog up, a sunglass-friendly soft handkerchief should be used.

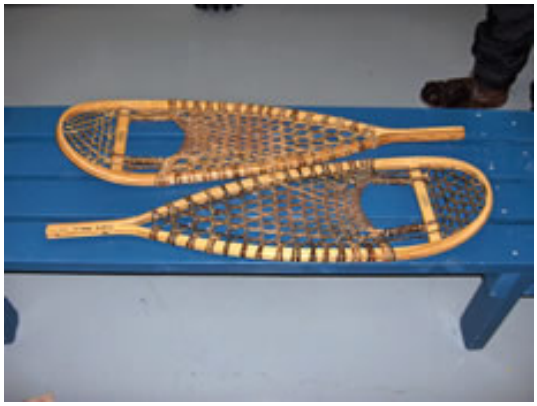
Snowshoeing Equipment

Securing proper equipment is essential for good, safe snowshoeing, so getting the correct type of snowshoe is the most important decision to make. There are two types of snowshoes: traditional wooden-framed snowshoes and metal snowshoes which are made from aluminum, rubber, and other "high tech" materials. To be competitive, it is recommended that a snowshoe specifically produced for competition is used. These snowshoes are lighter, smaller and asymmetrical (see explanation below).

Snowshoes

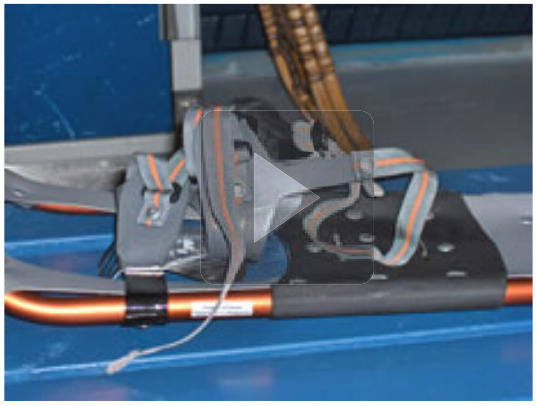
Shoe weight and size are critical in snowshoeing. It is estimated that one extra pound on the foot equals 5-10 pounds of weight on the back. Also, a narrower frame is better to keep the weight centered and the legs directly beneath the torso, so that the frame will not hit the lower legs as much. Body weight is a very small factor. Everyone will sink in dry, powdery snow no matter how big the snowshoes are, but even the heaviest athlete will be able to snowshoe in moist, compacted snow in smaller shoes. Keep the snowshoe as small as possible for the snow conditions. Rules state that the snowshoe must be at least eight inches wide and 25 inches long (20.5cm by 64 cm). This size works best for most adult athletes.

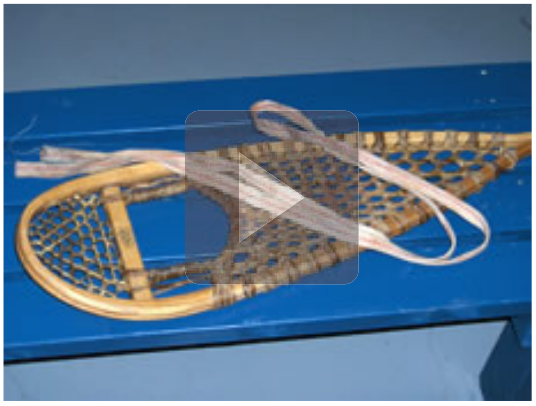





Snowshoe Anatomy

There are six parts to any snowshoe.





Frame

This is the outside of the snowshoe that gives it shape. It is made of aluminum, wood or extruded synthetic materials and may be in a symmetrical or asymmetrical form. The symmetrical frame centers the foot in the middle of the shoe while the asymmetrical frame is more in the shape of the foot, with a right and left shoe, allowing the feet to be closer together and eliminating the "snowshoe waddle." The toe of the frame is raised up and the tail is weighted to ensure better movement and make sure that snow does not collapse on the shoe. Generally, the smallest frame that allows flotation on the snow is best for racing.

Binding System

This secures the athlete's shoe to the snowshoe. Look for a solid landing platform, little movement inside the binding, comfort and no contact with the frame. Wooden snowshoes have a binding that is typically made of leather and attached at the toe cord. The alternate form of binding for wooden snowshoes is lamp wick (1 ½-inch flat cotton cord); the use of lamp wick requires the footwear to be modified to include loops on each side.

Pivot System

This allows for normal walking motion. There is a hole in the decking that allows the toe of the foot to go into the snow and push off while the frame remains on the surface of the snow. The pivot system on a wooden showshoe is formed when the binding is attached to the snowshoe.

Toe Cords

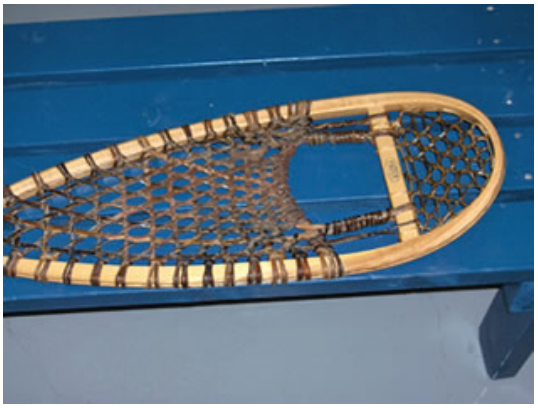
Toe cords are the part of snowshoes that connect the outer frame to the binding.

Crampons/ Cleats or Claws (Metal Snowshoe Only)

Spikes and claws grab the snow and provide traction when conditions are slippery. They are located beneath the binding, which also allows them to aid in pushing off. Rear traction devices under the snowshoe where the heel strikes are important for downhill traction and safety.

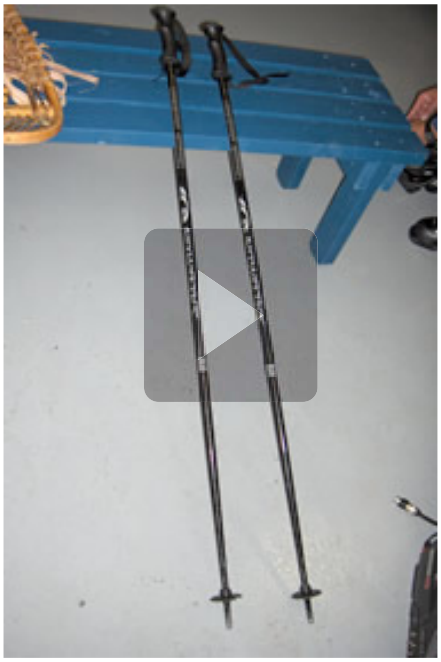
Decking

The decking material is attached to the frame and provides the majority of the flotation.



Poles

Most snowshoers do not use poles. Snowshoes provide much more traction, flotation and stability than a regular shoe, which helps most athletes negotiate slick, loose, deep and uneven snow with ease. Try to get your athletes to snowshoe without poles, if possible. Using poles is another action to coordinate when snowshoeing, and this will take more energy and motor control. If an individual can walk and run without poles when not wearing snowshoes, then he or she can snowshoe without poles. Certain athletes with very poor balance, strength or coordination may benefit from using poles. Ski poles that are long enough to reach from the ground to the elbow when the arm is hanging at rest are the proper length.



Teaching the Rules of Snowshoeing

The best time to teach the rules of snowshoeing is during practice. Please refer to the official *Special Olympics Sports Rules* for the complete listing of snowshoeing rules. As coach, it is your responsibility to know and understand the rules of the game. It is equally important to teach your athletes the rules and to make them play within the spirit of the game. Below are selected laws of the sport of snowshoeing. Maintain current copies of the official *Special Olympics Sports Rules* and your national and/or international federation snowshoeing rulebooks. Know the differences and carry these rulebooks to every game.

Divisioning

It is important that you as a coach learn and understand the rules and procedures of divisioning before attending competitions. Understanding the divisioning process will have a direct impact on your athletes' performance. The fundamental difference between Special Olympics competitions and those of other sports organizations is that athletes of all ability levels are encouraged to participate, and every athlete is recognized for his/her performance. Competitions are structured so that athletes compete with other athletes of similar ability in equitable divisions. Historically, Special Olympics has suggested that all divisions be created so that the variance between the highest and lowest scores within that division does not differ by more than 10 percent. This 10 percent statement is not a rule but should be used as a guideline for establishing equitable divisions when the number of athletes competing is appropriate.

Coaches are critical in helping competition management teams make divisioning work. Divisioning works best when coaches submit preliminary scores. This helps athletes get into the proper division as well as gain additional competition experience.

How Divisioning is Implemented

An athlete's ability is the primary factor in divisioning Special Olympics competitions. The ability of an athlete or team is determined by an entry score from a prior competition or the result of a seeding round or preliminary event at the competition itself. Other factors that are significant in establishing competitive divisions are age and sex.

Ideally, competition is enhanced when each division accommodates three to eight competitors or teams of similar ability. In some cases, the number of athletes or teams within a competition will be insufficient to achieve this goal. The following describes the sequential process for creating equitable divisions.

Unified Sports® Rules

There are few differences in the rules for Special Olympics Unified Sports® competition as the rules are stipulated in the official *Special Olympics Sports Rules* and modifications are outlined in the rules book. The additions are highlighted below.

1. A roster consists of a proportionate numbers of athletes and partners.
2. For snowshoeing, a Unified Sports team consists of two athletes and two partners of equal ability competing in the 4 x 100 and the 4 x 400 relay events.

Protest Procedures

Protest procedures are governed by the rules of competition and may change from competition to competition. Only rules violations can be protested. Judgment calls made by officials or divisioning decisions cannot be protested. The protest must site specific violations from the rulebook and a clear definition of why the coach feels the rule was not followed.

The role of the competition management team is to enforce the rules. As a coach, your duty to your athletes and team is to protest any action or events while your athletes are competing that you think violated the Official Snowshoeing Rules. It is extremely important that you do not make protests because you and your athlete did not get your desired outcome of an event. Filing a protest is a serious matter that can impact a competition's schedule. Check with the competition team prior to a competition to learn the protest procedures for that competition.

Snowshoeing Glossary

Term	Definition
Binding	The part of a snowshoe that attaches the footwear to the snowshoe.
Carrying Surface	Surface area of a snowshoe; the larger the surface area, the more flotation and support for the snowshoer.
Crampon	The sharp pointed traction device that may be attached to a snowshoe's pivot hinge to prevent slippage. Generally made from heat-treated aluminum or tempered carbon steel.
Claw	Like a crampon but with comparatively short serrations. Claws are an angle traction device attached to snowshoes. They give a "grip" comparable to that provided by the webbing of traditional snowshoes and are used in conditions where ice or steep surfaces are not encountered.
Decking	Solid or webbed pieces of nylon, rawhide or rubber-like material attached to the snowshoe frame that provides flotation for the snowshoer.
Fall Line	Shortest distance down a slope. The direction perpendicular to the ground that an object (you, rock, snow) would fall.
Flotation	Ability of a snowshoe to limit sinking down into soft or deep snow.
Frame	The rigid outer structural component of a snowshoe, usually made of wood, plastic or metal.
Heel Strap	Part of the snowshoe binding that secures the heel. It is a strap that wraps around the back of the snowshoer's footwear.
Lamp Wick	A 1 ½-inch cotton woven cord (oil lamp cord) used for binding snowshoes.
Pivot Rod	Attaches to the frame and allows the foot and binding to rotate as the snowshoer moves forward.
Tail	The rear area of a snowshoe frame.
Tip or Toe	The front area of a snowshoe frame.
Toe Hole	The opening in the front decking that allows the forefoot to pivot through a complete range of motion.
Tuque	A knitted hat adorned with a tassel on the top, the traditional headgear for snowshoers.

Appendix: Skill Development Tips

Moving Forward

To move forward on snowshoes is as easy as walking. As a matter of fact, it is walking. The movement forward is just placing one foot forward while the other foot is stationary, while making sure that the snowshoe is lifted up and is moved outwards just enough to clear the ankle and the other snowshoe. It is important to avoid overlap to prevent falling. Once athletes can competently move forward, they will be able to progress to running and sprinting.

Teaching Points

1. Begin on very flat terrain with athlete standing.
2. Move first foot forward.
3. Raise and bring second foot forward allowing for the width of the snowshoe to clear the ankle.
4. Place second foot down ahead of first foot.
5. Repeat steps.
6. To move faster, increase stride rate and/or length.

Avoiding Snowshoe Overlap

A certain amount of distance is required between foot-plants to avoid overlapping the snowshoes. When overlap occurs with a shorter stride, the tail of the leading snowshoe lands on and presses down on some part of the frame of the trailing snowshoe. When the snowshoer tries to bring the trailing snowshoe forward and off the ground to start another stride, he or she cannot since the trailing snowshoe is pinned to the ground by the overlap.

Avoiding this overlap is the primary technique to be learned when snowshoeing. Snowshoe overlap most frequently occurs at slower speeds and when walking. It is technically easier to run in snowshoes than to walk in them, simply because the stride and distance between foot plants is longer when running. Even when running, though, an athlete's stride may be too short to allow clearance.

Conditions that may result in snowshoe overlap:

1. Athletes with shorter legs
2. Deeper or looser snow
3. Uphill slopes
4. Fatigue
5. Toes do not point straight ahead when walking
6. The first few steps to accelerate from a stationary position are too short
7. Improper foot placement on snowshoe

Experienced snowshoers recognize these conditions and apply a simple technique to compensate: spreading the feet farther apart to avoid overlap. It does not take much, as you only need about five or six inches between the feet to clear eight-inch-wide snowshoes. Most people walk or run biomechanically best with one foot planted in front of the other. Some athletes must focus on spreading the snowshoes apart constantly to move at all.

Stopping

Many athletes may have a fear of slick snow that resulted in a fall or an unpleasant experience with a sliding sport (skating, skiing) because stopping required a skill they did not have. You may not see this until the snowshoers come to the top of their first hill and freeze, refusing to descend.

Stopping is the same as when stopping while running or walking without snowshoes. Athlete must de-accelerate if they are moving fast by taking gradually smaller steps/strides until they can just cease taking any further steps.

Teaching Points

1. Gradually, over a few strides, decrease stride length and rate.
2. Teach athlete to keep weight forward, off of tails of snowshoes.
3. Teach athlete not to use other object to stop.
4. Gradually slow down; don't stop abruptly.
5. Show athlete that a snowshoe does not slide like a ski.

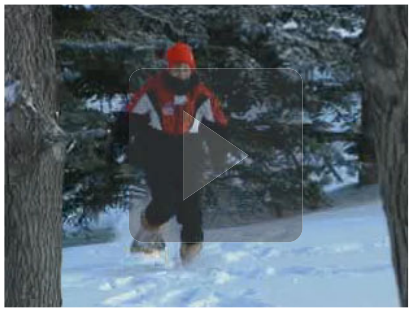
Turning

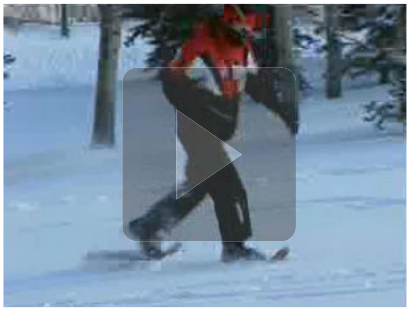
Turning on snowshoes is as easy as turning when walking or running without them, as long as the turn is not too sharp and the speed is not too high. Simply make each successive step a bit farther to the side in the direction the athlete wants to go.

At high speeds or on sharp (90 degrees or greater) turns, some snowshoes may slip sideways, as most snowshoes do not "edge" well. In these situations, the athlete must plant the snowshoe flat on the snow, not angling it into the snow. The tendency is to allow the snowshoe to make contact with the snow at an angle when one leans the rest of the body into a sharp turn or at high speeds to maintain balance. To counteract this, athletes should concentrate on landing on the balls of their feet (on front claws) and not angling the snowshoe.

Teaching Points

1. Teach athletes to take successive steps to the side.
2. Teach athletes to land on the balls of their feet with the snowshoe flat on the snow.
3. Teach athletes not to cause overlap on tips and tails of their snowshoes.
4. Teach athletes not to back up in snowshoes, but to take small steps when making a 180-degree turn.

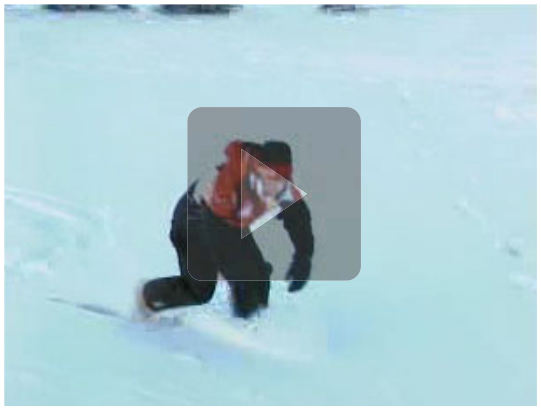




Falling

Before you begin the on-snow portion, it is important to teach your athlete the proper way to fall. Falls are a natural part of snowshoeing and falling in the correct way can prevent injury. Take some time to talk to your athlete, letting them know that it is OK for a fall to occur. By practicing falling an athlete will become less apprehensive if a fall does occur. Be sure that the athlete also has all of the proper protective equipment prior to practicing falls.

90% of the injuries from falling in snowshoeing are to the wrist and shoulder. Most of these injuries happen when a snowboarder falls forward in the incorrect way. Practice these movements side by side with your athlete. Start on your knees and let yourself fall forward onto your forearms. Catch your weight with the forearms away from the body slightly with the elbows bent (picture of starting and falling positions). Allow your forearms to touch the ground first. Try to resist reaching out toward the ground, or placing the hands out in front. As contact is made, absorb the fall with your arms. You may want to practice this movement with your athlete until he or she is completely comfortable with the movement.



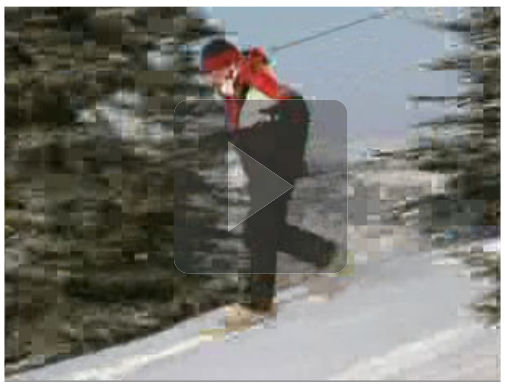
Teaching Points

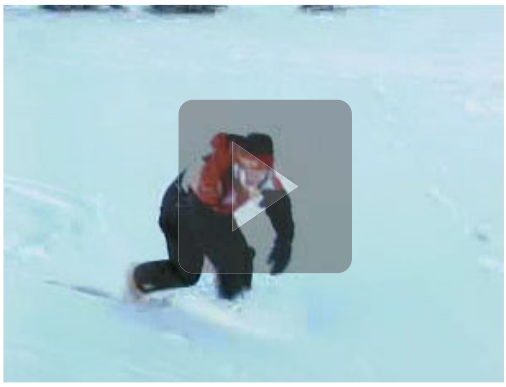
1. Emphasize that falling can be safe.
2. Emphasize keeping elbows bent and close to body when falling.
3. Teach athlete how to tuck and roll (roll on shoulder).
4. Make sure the athlete is not physically injured.

Getting Up

Because falling can be a common issue in snowshoeing, it is important to teach the athlete how to get up from the snow. Many times this can be more frustrating than the fall itself, especially on an incline. The easiest way for a snowshoer to get up is to rise from a kneeling position where the athlete can then slowly rise to a standing position.

Even an athlete in good condition may have problems getting up from a fall. It is important to work until the athlete is comfortable with this task. During lessons, it is a good idea to have the athlete practice getting up if he or she falls. It is also important to make sure that the athlete isn't becoming over tired from having to get up too often. In this case you may want to offer more assistance.





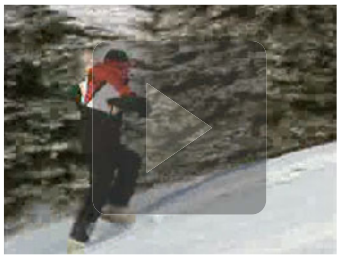
Teaching Points

1. If athlete falls completely to ground, roll onto side.
2. Get up to the hands and knees.
3. Raise one knee and set the shoe flat on the snow.
4. Plant poles (if using poles) in front and stand up.
5. Without poles, the athlete may plant hands on one knee for a boost, if necessary, to regain standing position.
6. Make sure the athlete is not physically injured.

Climbing Hills

The ability to go up a hill is a facet of the sport that makes snowshoeing fun. Snowshoeing is the fastest and easiest way to go up snow-covered hills using one's own power. There are many different ways to go uphill depending on the snow conditions and size of the hill. All techniques can be accomplished on either snow or sand.





Teaching Points

1. Show the athlete where the fall line is (the line a ball would take as it rolls down the hill).
2. The fall line is usually the most direct route possible up a hill.
3. Take shorter steps, keeping the head up.
4. Keep weight on the balls of the feet.
5. Keep feet spread apart to avoid overlapping snowshoes.
6. Stamp with the toe to dig the crampon into the snow for better traction.
7. Pump arms to power up the hill.
8. Lean slightly into the hill.
9. On short steep hills with loose or deep snow, crawling forward using the hands for balance and traction can help.

Descending Hills

Descending hills can be done safely using the proper techniques.




Teaching Points

1. Do not lean back.
2. Try to keep the upper body perpendicular to the slope, and point the toes down to maintain traction.
3. Extend arms out to help maintain balance.
4. Keep knees bent to cushion the impact.
5. It is easiest to run down a hill to get maximum traction and prevent snowshoe overlap, and it is important to do this on icy slopes.
6. It is easier to go straight down the fall line of packed snow hills than to traverse across slopes.
7. Avoid over striding. Brake and slow down by not leaning forward as much and taking shorter, quicker strides.

Sprint Starts

A good start can make all the difference in a sprint because the athletes want to get out at the start of the race strong and fast.

In a sprint start, the athlete puts the "power foot" forward for a strong launch. Determining the power foot can be easily accomplished by having the athlete pretend to kick a ball. The foot that is used to kick the ball is the back foot. The foot that is used to support the body is the front foot, the power foot. Another way to determine the power foot is to stand behind the athlete and give a little nudge. The foot that the athlete steps out with is the back foot for the start.

Teaching Points

At Start Line

1. Stand behind start line, relaxed, with power leg in front and tips of snowshoes behind line.

"Ready" Command

2. Lean forward slightly at hips and bend front knee slightly (about 120 degrees), placing weight on ball of front foot.
3. Hold opposite arm, from front foot, flexed in front of body.
4. Hold other arm back slightly past the hip and bent.
5. Stand as still as possible.

"Go" Command

6. Drive back leg forward, leading with knee, swinging front arm back.
7. Push strongly off ball of front foot, swinging the back arm forward forcefully.
8. Stay low, using arms to drive body forward.
9. Take wider steps when leaving the start line to avoid overlapping snowshoes.

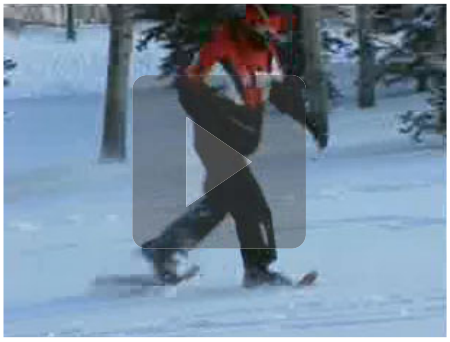
Acceleration to Top Speed

10. Use short, quick steps off the start line, allowing stride to increase in length as velocity increases.
11. Gradually transition to a more upright sprinting position.

Sprinting

Sprinting is the art of running as fast as possible. Sprinting happens when an athlete's legs move faster to propel them forward at a greater rate of speed. Sprinting is when more steps are taken and/or longer steps are taken. Sprinting is a mechanical body action that can be refined as the athlete gets more comfortable.



Teaching Points

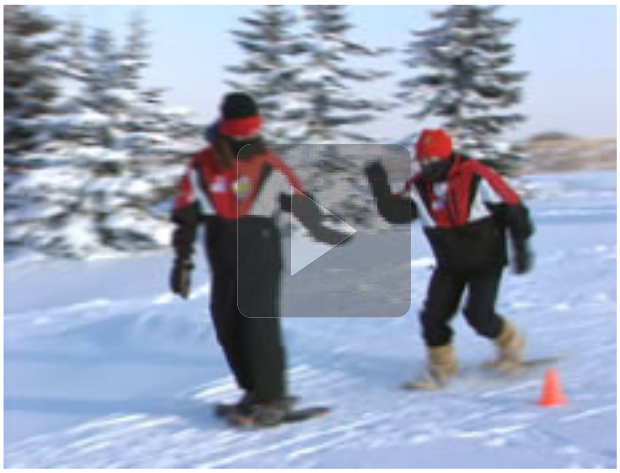
1. Run in an upright position so the maximum distance is attained with each stride.
2. The forearm and upper arm should form a 90-degree angle at the elbow.
3. Pump the arms (forward and back) with every stride.
4. The arm and leg movements should be synchronized. Move the right arm forward as left leg goes forward.
5. Increasing stride length or stride rate or both will increase speed.
6. Stay in lanes (25m, 50m and 100m). For other races, athletes need to keep moving forward toward the inside lane of track.

What is the body doing while you are sprinting?

Head	Straight ahead with eyes focused on the finish Relaxed jaw and facial muscles
Shoulders	Relaxed and square with little or no rotation
Hands	Clasped, not tightly, with the thumbs up
Arms	Used for balance Drive up and out and do not cross the body
Feet	The toes are straight ahead

Relay Races

Relay races are the 'team' events in snowshoeing. It is the art of running as fast as possible while making a successful connection with the next runner on your team. Relays develop a camaraderie and sense of team. Relay teams consists of four teammates who proceed around the track in order. To make a successful 'tag' (or 'exchange'), the racers have to stay in a set zone while the incoming runner tags the hand of the outgoing runner.

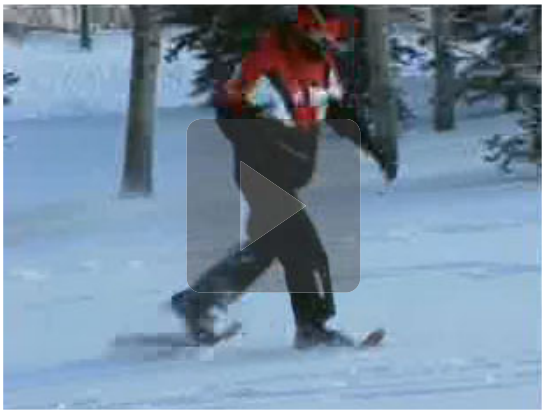


Teaching Points

1. Receiving athlete is positioned in exchange area a few meters in from the start of the exchange area.
2. Receiving athlete is standing in ready position with body slightly turned, arm extended to the side and back, with palm facing up.
3. Receiving athlete watches for approaching teammate.
4. Receiving athlete starts to move forward when approaching athlete reaches the exchange zone or a predetermined point.
5. Approaching teammate runs up to extended-arm side of receiving athlete and tags the hand of the receiving athlete.
6. Receiving athlete runs to next exchange zone.
7. Approaching athlete continues to move in a straight line until coming to a gradual stop.
8. Approaching athlete turns to look that there are no other approaching athletes. When track is clear, proceed off track into the infield area.

Distance Snowshoeing

These are the longer races that really test an athlete's endurance. It combines cardiovascular endurance and endurance to elements such as wind and cold, if training and race conditions are not perfect. These events require specific training to ensure that athletes have the endurance to train and compete at the longer distance and not be at risk for injury.



Teaching Points

1. Keep tall, in an upright position.
2. Have controlled relaxed arm movement.
3. Keep shoulders not hunched and elbows tucked in
4. Try to maintain same speed throughout the entire distance of the race.
5. Keep body relaxed.
6. Appropriate aerobic conditioning is required – athletes should increase duration first, then intensity, to improve conditioning.

Waterfall Start

For events involving a turn, 200 meters and up and the relays, a curved "waterfall" starting line is used so that all snowshoers in all lanes of the track cover an equal distance to a point at the start of the first turn. Snowshoers are lined up starting from the inside lane or lane 1. This lane is reserved for the quickest athlete.

Teaching Points

1. Snowshoers should have a good understanding of starting and passing skills, as both will be required.
2. Snowshoers should position themselves at the start line so that they are pointed toward their target point at the first corner.
3. The target point should be the last point along the inside edge of the track visible to an athlete positioned at the start line.
4. Snowshoers need to judge the minimum distance to the athlete(s) ahead and beside them to avoid collisions and blocking.

Following the race start, the snowshoer should take the shortest path to the target point based on the position relative to other snowshoers. Passing can occur during this section but generally requires the athlete to pass on the right. This results in a longer path which may warrant the snowshoer waiting to pass on the straight to minimize the distance covered to accomplish the pass.

Pacing

One of the most difficult advanced skills to learn for a snowshoer is proper pacing. It is more efficient and faster to maintain a constant speed during all segments of a race than to move at an uneven pace. Proper pacing is especially important in longer distance races of 800 meters and above. Depending on the skill and ability level of the athlete, pacing can become important in races as short as 100 meters.

It is sometimes difficult for an athlete to apply the concept of proper pacing, as typically many other athletes in a race will not run with proper pacing. Most athletes start too fast for their aerobic and physical ability, slow dramatically in the middle, and then sprint to the finish. After all the basic skills of snowshoeing have been mastered, improvement essentially comes down to practicing to improve fitness and conditioning so that the athlete can maintain a faster pace throughout the race until the finish.

Teaching Points

1. Make sure your snowshoers can actually move at different speeds and can do this independent of others. It may help if you or someone else initially snowshoes along with your athletes to show them different speeds and paces, but realize that the athletes must eventually learn to do this on their own.
2. Emphasize that it is not always the athlete who starts the fastest who wins a longer race.
3. Inexperienced athletes usually start longer races at the pace of the fastest starter, and then as they go into oxygen debt, everyone slows down except the fittest athlete. All others must slow until they recover (which they never completely do) and then start moving faster again at their own individual threshold pace. This is a very painful and inefficient way to run a long race.
4. Emphasize that a consistent pace and speed over the entire race is what usually produces the fastest times. The effort required to maintain a high even pace will increase as fatigue accumulates. An analogy is that over 50% of the effort is used in the last 25 % of the race.
5. Athletes need to run their own best race and pace for the first part of a longer race, and then focus on actually racing other athletes later in the race. Emphasize that the skill at the beginning of a race is to run near their ideal even pace, and this may require letting other athletes get ahead.
6. Coaches should determine at what pace an athlete should move in an ideal even-paced race, or the "goal pace." Take the best time for an athlete for a given distance, and then divide that time by the number of segments of a shorter distance that goes into the longer distance evenly. This will give you a time-per-distance speed to strive for. The shorter distance is usually 100 or 200 meters for a 400-meter race, 200 or 400 meters for an 800 or 1600-meter race, and 400 or 1000 meters for the 5 K or 10 K.
7. An 800-meter runner with a best time of 4:00 should maintain a speed of 1 minute per 200 meters for an even paced race, as 800 divided by 200 equals four and 4 minutes divided by four equals 1 minute.
8. A 5 K runner with a best time of 32:00 should proceed at a pace of 6:24 per kilometer, or about 2:56 per 400-meter segment.
9. These goal pace/distance times are a key tool in allowing athletes to practice even pacing and are useful for athletes to gauge their progress in longer races, if they can take or get intermediate split times from their coaches. Good coaches follow every step of their athletes in longer races and record intermediate split times to analyze later.
10. A workout for distance snowshoers might consist of multiple repetitions over a known shorter distance at a speed equal to the pace they want to maintain for their entire distance, with rests in between. For example, a 1600-meter snowshoer with a best time of 10:00 minutes might do a workout of six times 400 meters at a speed of 2:30 per 400, and with a jog of 200 to 400 meters between each of the six repetitions.
11. As fitness improves, the athletes can increase the number of these repetitions and/or decrease the time/distance resting between them. Athletes can increase the speed when they improve their best time.
12. Coaches should be aware that athletes' best times for a distance may rapidly improve at first, once they learn to pace themselves properly. Goal pace is something that can change weekly/daily for a novice snowshoe athlete, but is more constant for experienced athletes.
13. Be aware that snow conditions, weather, hills and terrain may drastically affect the speed at which a snowshoer might travel in a race. Athletes should thus learn to eventually base their pacing more on effort than speed.

Passing

The ability to safely and effectively overtake and pass another snowshoer is a skill all snowshoers should understand and use. Snowshoeing is unique among Special Olympics winter sports in that most of the races involve a mass start and the athletes do not have to stay in lanes. Passing is a form of interaction among the groups of racers.

Teaching Points

1. A pass is usually required when a faster snowshoer catches up to a slower snowshoer or a snowshoer who has fallen or stopped. Near the end of a race, it is sometimes wise to initiate a pass so that the snowshoer has a clear run at the finish in case the leading snowshoer slows.
2. Straight sections of the course or track are the best areas to pass. A snowshoer attempting to pass on the outside of a turn will have to cover more distance to pass, and thus will have to be moving significantly faster to make the pass successful. A snowshoer should be able to look ahead to see what is coming up on the course before starting a pass. If the course soon narrows, it may be best to wait until after that to initiate the pass.
3. Athletes should move to the side with sufficient space to pass, and to the side that will position them on the inside of the next turn, if possible. Generally, snowshoers on a track will keep to the left edge, and passes will have to be made on the right. It is possible to pass on the left side on a track if the snowshoer in front has strayed from the left side and the pass can be made quickly enough so that the passing snowshoer cannot be cut off by the snowshoer in front, who has the right of way.
4. Generally, you need to move at least 50 cm (20 inches) to the side of a snowshoer to pass. More is better as long as it does not significantly increase the distance to be covered.
5. Ideally a pass can be made without significant energy-wasting changes in pace. Usually, completing a pass involves a slight acceleration in order to compensate for attempts by the leading snowshoer to maintain the lead.
6. The extra length of snowshoes requires that passing snowshoers attain a greater lead before moving in front of the passed athlete than if they were walking/running without snowshoes on. A passing athlete needs to turn the head slightly to glance over in order to determine when he or she has a sufficient lead. Generally, a snowshoer needs to be a minimum of two strides or about 1.5 meters (4 1/2 feet) ahead to move in front without interfering.
7. After taking the lead, the passing athlete should resume his or her own race. This means moving toward the side of the course so as to be on the inside of the next turn. The passing athlete should not worry about those behind him or her on the course.

Finishing

Finishing a race requires the development of pacing skills and timing to allow the snowshoer the opportunity to maintain or even increase speed just before the finish line. Snowshoers who effectively use finishing skills can improve their final positions relative to other athletes who do not have the endurance or energy to apply the final "kick" to the finish line. In very close finishes, the snowshoer who applies the finishing lean may improve his or her final position. The snowshoer whose torso crosses the finish line first is scored higher.

Teaching Points

1. The snowshoer should have a good understanding of pace and passing skills, as both will be required.
2. The snowshoer needs to judge the maximum distance to the athlete(s) ahead and the distance required to catch and pass the athlete(s). Sufficient distance to the finish line should be given for any challenges to the passing maneuver by the opposing snowshoer.
3. An allowance of a few meters for these challenges is usually sufficient. Risk of the snowshoer regaining the position increases if the finishing kick and pass are completed too early.
4. Sprinting events require the snowshoer to maintain speed and lean into the finish line with the torso as required in close competition. The athlete should be able to lean forward just enough to gain the advantage but not so far forward as to lose balance and fall forward or lose forward speed.
5. Distance events require the snowshoer to use an adequate race pace to maintain an acceptable recovery distance from the leading athlete.