

## **Gear & Equipment**

### **Clothing**

Please make sure your children are prepared for a day on the slopes. Cold, wet skiers are not happy skiers and unhappy skiers are poor learners. Please ensure that kids/athletes have good water resistant clothing, and please put an extra sweater, gloves and face warmer in their packs in case it gets colder or wetter through the day. Ponchos can also come in handy on those wet days on the mountain.

U12: Although it is not mandatory many U12 athletes will start to wear DH/GS suits for training and designated races. Once athletes begin wearing DH/GS suits they will also require pants that zip off, for easy removal at races.

Club vests are available for rent for U12 athletes. Club jackets are available for athletes once they reach U14. Club jackets are for sale by the club and used jackets are often available also. Always check with a club executive or the Buy n Sell page.

### **Equipment**

Equipment has evolved very quickly in the last few seasons making the skiing progression occur much faster and making skiing way more FUN! Please keep the above in mind and look for equipment that was produced in the last few seasons. Also look for equipment that was designed for junior racing as opposed to recreation gear. All junior racing products have been designed specifically with junior racing speeds and athlete sizes in mind.

Buying equipment for the younger age groups is fairly simple, as they will be using a junior multi-event ski and only require straight poles, and junior boots. For the younger athlete, shorter skis can influence ski acquisition and allow more versatility. As the athlete approaches the U12 and U14 levels, two disciplines are introduced GS (Giant Slalom) and SL (Slalom). SL skis are shorter with more side cut, while GS skis are longer with more of a progressive side cut. The athlete's equipment list will grow (at U12/U14 level) and include shin guards, pole guards and a chin guard for slalom and the racers will wear downhill suits once they enter into zone competition and provincial competitions.

Our main focus at younger ages is on FUN and majority of time is spent on smaller, quicker turns, children should be on slalom skis for these years. Many athletes at the U12 age will have two sets of ski's, one for slalom and one for GS. You can find good used ski's on our buy n sell page from other club members. A recommended supplier for Junior Gear is Mad Dogs Ski & Snowboard at 2556 Montrose Ave, Abbotsford and

the Swiss Sports Haus at 490 15<sup>th</sup> Street West Vancouver for Alpine Race Gear. They offer a club racer discount.

### Guidelines for ski sizing

It is beneficial to go shorter rather than longer when choosing length for the entry-level participants. A shorter ski will facilitate turning, allowing quicker progression of basic skills and definitely increasing the athletes' enjoyment of skiing.

The ski should be between the nose and the top of the forehead for entry level participants.

Longer skis may be appropriate as skill acquisition occurs. Purchasing skis that are too long may impede skill development in the long term.

Please refer to the following chart for ski selection but remember that these are only guidelines:

Age	Ability Level	Athlete Size	Height	Size SL	Size GS	Size SG
Nancy Greene U10 Ages 6 – 9	All Abilities	< 75 lbs.	<43 in. 43 – 48 in. 48 – 53 in. 53 – 57 in.	100 cm 110 cm 120 cm 130 cm	100 cm 110 cm 120 cm 130 cm	N/A
U12 Ages 10-11	All Abilities	> 75 lbs.	< 48 in. 48 – 53 in. 53 – 57 in. 57 – 61 in.	N/A 124 cm 130 cm 136 cm	128 cm 135 cm 142 cm 149 cm	N/A
U14 Ages 12-13	All Abilities	All Sizes	48 – 53 in. 53 – 57 in. 57 – 61 in. 61 – 65 in.	130 cm 136 cm 136 / 143 cm 143 cm	135 / 142 cm 142 / 149 cm 149 – 156 cm 156 / 163 cm	156 cm 163 cm 170 cm 175 cm
U16 Ages 14-15	Developing skills / Skilled	< 100 lbs.	48 – 53 in. 53 – 57 in. 57 – 61 in. 61 – 65 in.	143 cm 150 cm 155 cm	149 – 156 cm 156 / 163 cm	156 cm 163 cm 170 cm 175 cm
U16 Ages 14-15	Developing skills / Skilled	> 100 lbs.	57 – 61 in. 61 – 65 in. 65 in. and up	143 cm 143 / 150 cm 150 / 155 cm	163 / 170 cm 170 / 175 cm 175 / 180 cm	188 cm
U18 Ages 16 & up	BCA & Regional Athletes	All Sizes	61 – 65 in. 65 – 68 in. 68 – 71 in. 71 in. and up	155 cm 160 cm 165 cm	175 / 180 cm 183 / 187 cm	200 cm 208 cm
U18	FIS Level	All Sizes	Women	155 cm	175 cm	200 cm

Ages 16 & up	Athletes				180 cm	
					183 cm	
			Men	165 cm	180 cm 183cm 187 cm 193 cm	200 cm 208 cm

## Ski Boot Selection

### General Mechanics

Boots are the most important part of the equipment equation, as they will influence the movement and energy generated through each turn. If a boot does not fit properly it can increase the risk of injury and directly affect performance. At the younger age groups (U6/U8/U10) a comfortable fitting boot with a reasonable 'flex' can be used. The athlete should be able to flex the boot forward, simultaneously, as they apply shin pressure to the tongue. It can be fairly subjective, as you want the boot to have a flex that allows the athlete to move the upper cuff forward, but does not 'give out' and provides some resistance. Boots will progress from a side buckle, to two/three front buckles and eventually to a full race boot with a power strap, two upper cuff buckles and two on the top of the foot, with varying 'flex'.

### Boot Mechanics

- At the younger age there is an overlap design boot and a rear-entry boot
- An overlap design hinges at the ankle joint, and separates the lower cuff from the upper cuff. This allows for more of a natural movement forward/backwards and laterally, therefore enhancing performance
- A rear-entry boot is a single piece of plastic, and although it is said to be more comfortable, **it is not the most appropriate boot for ski racing.**

### Boot Flex

- The boots stiffness (flex) should promote forward flexion.
- The boot should flex forward simultaneously, as the athlete applies shin pressure to the front of the boot.
- The boot should allow the athlete to align naturally throughout the lower joints. (Tip: a professionally made/constructed foot bed can aid with alignment)

- It is recommended that a softer boot is more conducive to performance compared to a boot that is too stiff (i.e. if athlete's lower leg moves forward, but upper cuff does not)

### **Boot Size**

- Young athletes are constantly growing, and this needs to be taken into consideration when sizing for the upcoming season.
- However, a boot that is too big can be counter-productive to an athlete's performance and on-snow experience (similar to skis being too big/small)
- A poorly fit boot can cause unnecessary rubbing or bone spurs and possibly negative affects long term.

### **U8/U10 or U12s racing with 1 pair of skis (Multi-event)**

	<b>Weight (lbs)</b>	<b>Size (cm)</b>	<b>Ski</b>	<b>Binding</b>	<b>Boot</b>
Ages 6-10	40-50	100	Multi-Event Jr. Race		Jr. Boot <65 flex
Ages 6-10	50-60	110-120			
Ages 6-10	60-70	120-125			
Ages 6-10	70-80	125-130			
Ages 6-10	80-100	130-140			

### **U12**

	<b>Weight (lbs)</b>	<b>GS Size (cm)</b>	<b>SL Size (cm)</b>	<b>Binding</b>	<b>Boot</b>
Ages 10-11	60-80	135	125	Jr. Race	65-70 flex
Ages 10-11	80-90	140-145	125-135	Jr. Race	65-70 flex
Ages 10-11	90-100	145-155	130-140	Jr. Race	65-70 flex
Ages 10-11	100-120	155-165	140-150	Jr. Race	70-90 flex

### **U14**

	<b>Weight (lbs)</b>	<b>GS Size (cm)</b>	<b>SL Size (cm)</b>	<b>Binding</b>	<b>Boot</b>
Ages 12-13	70-80	135-145	125-130	Jr. Race	65-70 flex
Ages 12-13	80-90	145-150	130-140	Jr. Race	65-70 flex
Ages 12-13	90-100	150-160	140-145	Race	70 flex
Ages 12-13	100-120	155-165	145-150	Race	70-90 flex
Ages 12-13	120+	165-170	150-155	Race	70-90 flex

**Helmets are mandatory!** All program participants, competitors and forerunners are obliged to wear helmets that have hard ear covers that conform to the competition equipment specification. U14 & U16 Athletes require a FIS certified helmet ( FIS RH2013 rule) for GS/SG/DH races. Look for FIS sticker on back of helmet. A cross blocking chin guard is required for the helmet for SL starting at the U14 level.

### **Protective wear:**

**It is suggested that Athletes U12 and older will need some special protective gear for slalom:**

Shin Guards & Hand guards that attach to poles.

**Poles** – to measure the appropriate length of a pole, flip the pole upside down and place on the ground. Have the athlete stand behind and grip the pole underneath the basket (side closer to the ground). The arm should be at a 90 degree angle. Poles must have pole baskets

**Ski tuning equipment:** Properly maintained ski's easily glide across the snow and hold their edge in all conditions, allowing for quicker skill acquisition and making skiing easier and more enjoyable at all levels! Conditions can change quickly on the mountain, we can have a foot of light fluffy stuff in the morning that becomes wet slop by the afternoon and arrive the next morning to find a very hard surface (ice)....Ski's need to be maintained daily, especially for those in programs U12 and above!

Keep your wax kit simple to start and build it as you/your athlete moves through the program.

Basic kit should contain:

- Wax for a variety of snow temperatures, mainly warm, +2 to -4.
- File guide, 90 (0) degrees for younger athletes, up to 87 (3) for older athletes.
- Good file! A good file will cut better, remove less edge, make ski's sharper faster and make ski's edge last longer.
- A diamond stone, medium grit.
- Plastic scraper
- An iron to wax with, preferably without holes in bottom.
- At some point every racer will need vices for skis, it is impossible to properly tune skis without vices.

\*\*Please note that these are merely recommendations for an athlete at each age group. These recommendations should be considered with the input of the past/current coach, as well as a ski industry professional\*\*

## **Volunteering & Fundraising**

Hemlock Ski Club is a non-profit organization run by members. Only our coaches are paid! Our success depends on the many volunteer hours that parents donate to the Club. We have the good fortune to have dedicated and enthusiastic volunteers who work together in teams (and have fun doing so!). There are many ways to get involved with the Club and you don't even have to ski to do them. Please don't be shy, jump in and lend a hand, "Many hands make light work". Please speak with one of the Executive or Volunteer Coordinator to find out ways to get involved, or let us know if you have a particular talent or interest that could benefit the Club.

**Volunteer effort is the backbone of our club!** Club fees provide one third of the funds required to operate our organization for the season. The expenses include coaching wages, Provincial registration fees, Cabin maintenance, office supplies, equipment (Gates, Timing, Radios, Bibs, Drills, etc) to name a few. The remaining funds must be made up through corporate sponsorship, and volunteer efforts.

**Some of the many volunteer opportunities to choose from:** The list is long but includes Equipment Manager, Media Coordinator, Sponsor Coordinator, Event/Fundraiser Coordinator, Volunteer Coordinator, club cabin clean up, race volunteers, Nancy Greene group helper, sponsorship/fundraising etc....

### **FUNDRAISING**

The funds necessary to run our club come from fundraising activities and corporate sponsorship. Please pitch in and help us keep costs of our programs down!

**Valentines Dance & Silent Auction:** This event is an annual event and is always a hit with our club members and community members. It is a fun event and brings much needed funds into the club.

**Your Ideas:** We are eager to hear your suggestions for fundraising opportunities.