



Glencoe Ski Club

Parent's guide on performance ski equipment for U10 and U12s

Alpine skiing is a “gear intensive” sport but does not require you to buy expensive stuff all the time. The following should help you in deciding what equipment is important for your youngster for the formative years of their ski development. While the following advice is geared towards performance skiing with the club's training programme, it is equally relevant to recreational skiing.

Skis

Families are encouraged to buy only one pair of skis per year for the early years of skiing starting with all mountain skis. A piste performance ski is preferable to fat twin tip / free-ride for skills acquisition. Skis may be new or used but should come from any of the well known manufacturers out there that support performance ski e.g. Fischer, Salomon, Atomic, Dynastar, Rossignol, Volkl, etc.

Always look for equipment that was designed for junior performance skiing / racing as opposed to recreation gear. All junior performance ski products have been designed specifically with junior 'racing' speeds and athlete sizes in mind.

Guidelines for sizing:

- The ski should be between the nose and the top of the forehead for entry level participant 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.
- Longer skis may be appropriate as skill acquisition occurs. Purchasing skis that are too long may impede skiing skill development, in the long term.

Examples of skis for 2021, include:

- ATOMIC Redster J2-J
- HEAD SUPERSHAPE TEAM SLR PRO
- DYNASTAR Speed Team Open SL
- VOLKL Racetiger SL R JR

Ski Boots - General Mechanics

A distinction needs to be made with respect to performance and comfort factors in boot fitting, keeping in mind that there are 2 options in boots for the entry level skiers; overlap design and rear entry design.

Overlap design has a cuff that articulates with the lower shell using a hinge at the ankle joint. This design provides performance for the entry level participant by allowing natural ankle flexion, due to the hinged cuff of the boot. The overlap design also allows for lateral action of the lower leg, a critical factor in skill development.

Rear entry design is comprised of a single piece of plastic encompassing the foot. Rear entry boots are not recommended for the club's training programme.

Boot Flex

For the entry level, a softer (easier to flex) boot will be more effective than a stiffer boot, due to strength limitations and skill level.

- To determine if a boot is soft enough, you should be able to see the forward boot flexion happening in the upper cuff simultaneously with the lower leg.
- If the lower leg moves forward and the upper cuff moves very little, then the boot is too stiff.
- The boots should not inhibit the natural alignment of the athlete.

Boot Size

Growth of the participants' feet during the season needs to be considered, but similar to skis, buying boots oversized is counter-productive for both performance and fit.

Boots that are fitted poorly have the potential to cause bone spurs and possible medical problems in the long term.

Foot beds

These are important factor for performance but at the entry level, foot beds do not play an important role due to growth and cost factors.

Protection Helmets

All club performance training program participants and those taking part in competitions are obliged to wear a helmet that conforms to the [regulation competition equipment specification](#). Helmets used shall be specifically designed and manufactured for the respective discipline and shall bear a CE mark and conform to recognized and appropriate standards such as EN 1077, CEE 1077, US 2040.

Helmets should not be modified in anyway as this may impact on its integrity, for example being mounted with a GoPro camera mount, stick on bunny ears, etc.

Back Protectors

Back protection, like head protection, is an essential when it comes to skiing and race training. While back injuries are not the most common injuries seen, wearing a back protector should definitely be something to consider.

With modern advances in technology, back protection has become a lot more comfortable to wear. Created with more flexible material, they fit better the shape of your child's back and are able to move as they do.

Back protectors come in either a harness, vest or jacket style. It tends to just be a matter of personal preference that sets these apart; all have their various pros and cons. Most important – [a back protector must fit correctly](#).

Ski pole hand guards

Pole hand guards are typically only used by slalom racers who are clearing "hitting" slalom poles. Pole guards are made of hard plastic, attach to the shaft of the ski pole and cover the hand.

Slalom racers use pole guards to knock the gates away from their body/head when skiing a good line through a slalom course. Different manufacturers have different models of hand guards and some models of ski poles will only accept those guards specially designed by that manufacturer. Hand guards that can be removed and refitted to new ski poles as the racer grows, are useful.

If in doubt about any of the above, please feel free to ask your club coach/ instructor before buying, we are here to help.

Gary Todd
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