

## A Start to the New Training Year – Late Spring/Early Summer Guide to Training For Coaches and Parents

Jon Nolting, USSA Director of Sport Education

Preparation for ski and snowboard competition is a year-round process. This does not mean that to be successful young skiers and riders should be on snow year-round, but it does mean that a planned year-long approach will be the most beneficial for development. It includes several elements that do not involve skiing and riding, and it looks much different for an eleven year old than it does for an eighteen year old. The principles are consistent across the ages and apply to other sports as well. To outline the appropriate things for skiers and riders to think about, we'll look at athletes in the various developmental phases, as identified in the USSA Training Systems. (These training systems are found at <http://trainingsystem.ussa.org> for alpine and Nordic; freestyle and snowboard are in development this summer, but these phases are the same through all sports.)

### USSA Developmental Phases

PHASE 1	PHASE 2	PHASE 3	PHASE 4	PHASE 5	PHASE 6
Pre-puberty Ages 2-6 Play age: 1-4 years in sport	Pre-puberty Ages 6-10 Training age: 1-4 years in sport	Pre-puberty (Before growth spurt) Girls ages 10-13 Boys ages 11-14 Training age: 4-8 years in sport	Puberty (Growth spurt) Girls ages 11-14 Boys ages 12-15 Training age: 5-9 years in sport	Post-puberty (After growth spurt) Girls ages 12-16 Boys ages 14-17 Training age: 6- 11 years in sport	Full maturation Girls ages 16+ Boys ages 17+ Training age 10+ years in sport

Note that from this chart, the child's biological development determines the phase they are in, not their birth age. The phase may vary by at least two stages for two athletes of the same age.

For all levels, at the end of the season the athletes need a break from focused training for their sport for about a month. This period should be active, with the athletes choosing activities they'd like to be engaged in. For many school aged ski and snowboard athletes this is a spring sport at school. Through phase 4, such multi-sport involvement is an important part of their ski and snowboard training.

After a good break, athletes are ready to start their training program for the upcoming season. For late May and June, the training focus should be on establishing a base. The excellent snow coverage in this early period at places like Mt. Hood, Mammoth, Arapahoe Basin, and Whistler/Blackcomb, makes this an excellent time for athletes to participate in their first on-snow training camp of the new season. This first camp should be technical fundamentals skills based and take advantage of the variety of terrain and decreased crowds of early summer training. Coaches should work with the athletes outside of their competition environments, planning a camp with lots of mileage on basic, core skills, taking the time to progress the athletes only as they are ready. Athletes in phase 3 and older will benefit greatly from these camps.

In addition to more skiing and riding, these early summer camps are designed to introduce the conditioning programs for the athletes. Across all phases, the general conditioning principle that applies to late May and June training is building the base. This involves a focus on endurance training, strength training with an emphasis on technique and lower loads with higher repetition, flexibility, and core strength work. Baseline testing, as discussed in the April Excellence newsletter, is also productive at this time, and is best introduced a couple of weeks into the return to training. For athletes in phases 3 and younger, it is critical to include plenty of activities that drive motor skills learning. Activities that emphasize agility, balance, and coordination are key for this group. Involvement in other sports that challenge these areas is perhaps the best way to keep it fun, improve athleticism, and learn competition skills that will be of benefit in the winter.

Embedded in the developmental phases introduced above are "sensitivity windows" when children are physiologically primed to make maximal improvements in particular areas of skill. Coaches need to take advantage of these windows of opportunity as they arise. Athletes in the second half of phase 2 through phase 3 are primed to make maximal gains in motor skill development. Skiers and riders must learn and rehearse the proper techniques for their sport during this period with lots of repetition. This is the time to develop a broad base of motor skills, so they will be adaptable as they improve. This base can be developed through conditioning and lots of structured and unstructured free skiing and riding. In phases 3 and 4 athletes can make great gains in stamina, or aerobic capacity. The USSA Training Systems outline those activities that athletes are physiologically ready for at a given age and developmental level under the conditioning emphasis heading.

What is the club's role in summer conditioning? First and foremost it is awareness and education. To compete at a high level in skiing and snowboarding, children need to be great athletes. Through phases 2 and 3 this should be developed through a sampling of many sports. It is essential that athletes in these age ranges are physically active with lots of variety and an emphasis on fun. Into phases 5 and 6, the conditioning focus should become more sport-centered for skiing and snowboarding. Other sports may be used for cross-training, but they are chosen based on the training needs at a particular time in the year-long training plan. For example, cross-country running would be a good late spring/early summer sport, but it may not be a good choice as a fall sport for an alpine or freestyle skier due to its over-emphasis of endurance skill to the detriment of time spent on anaerobic power, strength, and speed. Since children do not get as much time in physical education in schools as they used to, the club has a greater responsibility to teach its athletes. Developing summer conditioning activities that are age-appropriate is an opportunity clubs should take advantage of. A well-designed program can be used to attract athletes in the community from many sports, and ultimately can be used to support recruitment for the club. If the expertise is not available at the club, there should be a relationship developed with a knowledgeable strength and conditioning specialist or athletic trainer at a nearby athletic club or recreation center for club athletes. Great results next season will be borne from well-planned training programs that start now and are age-appropriate, progressive, challenging and fun. Take advantage!

**Resources for coaches:**

- Elite Performance Series: Strength & Conditioning CD-ROM  
<http://www.ussa.org/magnoliaPublic/ussa/en/formembers/coaches/learningmaterials/SportScience.html>
- USSA Sport Science physiology resources  
<http://www.ussa.org/magnoliaPublic/ussa/en/formembers/sportscience/physiology.html>
- USSA Training Systems <http://trainingsystem.ussa.org>
- Successful Sport Parenting CD-ROM  
<http://www.ussa.org/magnoliaPublic/ussa/en/formembers/coaches/learningmaterials/Parenting.html>