



Mike Wiegele Helicopter Skiing

SKI TIPS & TECHNIQUES

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MARTY HANSEN SHOWS US WHEN IT COMES TO SKIING, SQUATS ARE THE TICKET

This month's ski tip is from Marty Hansen, past Wiegele employee, ski coach, professional trainer, and high performance sport consultant. Founder of the Banff Mountain Academy and the Avalanche Ski Club, Marty has worked with two provincial ski teams and coached Canadian and Australian National Alpine Ski Teams at the Olympic Level. Presently he conducts 20+ personal and group training sessions per week and consults to Winsport Canada staff, coaches other trainers and organizations on their business practices and training programs, and speaks each year at the annual Canadian Ski Instructors' Alliance National Convention.

Improve your performance on snow with a better Squat off snow!

Good skiing is getting on and off the edge at will. Reducing time on the edge is directly related to your ability to relax appropriately after the edge has been hit.

Understand

A specific quality of strength is the ability to move between contacts with precision. Squatting down and extending up using the hips first then the knees is the foundation to improving endurance in this movement. Increasing the weight you lift and the volume of reps will happen more naturally. Keep this approach in mind while you are training.

Starting Point for the Squat Movement

Feet are positioned about hip width apart with toes pointed out slightly. Hands are off waist and thigh, but used for balance if not supporting weight.

Movement

With weight over the whole foot, the first movement is to "sit down and back" by hinging at the hip and then bending the knees and ankles evenly. Flexion downwards is in control with concentration in the transfer towards extension at the bottom of the squat. Visualize your back paralleling your shin from a side profile, and that your feet claw the ground. Breath is exhaled through the mouth at the top of extension and drawn through the nose while flexing or squatting down. Breath is held through the transition from flexion to extension. Use the hips as well as the quads to perform the lift, keep knees tracking in alignment with feet.

Progression after 4-6 weeks

With a starting point of a narrow split in the feet, flex through the squat and allow the trailing foot's heel to come off the ground. This requires more effort from the core to

stabilize as the squat is performed. Alternatively, pressing overhead with the momentum of extension can increase a different tension as the center of mass is raised.

Also alternate and reciprocate the foot position while performing the split squat. Alternating allows for a precise change to move the trailing foot forward and the forward foot back in a 2 move process at the top of extension. Reciprocating foot position is to do the before mentioned movement in one process thus increasing effort and dynamics.

Start to incorporate jump ups after each set. Do 4-8 jump ups on to a box or up stairs, this will add to your speed.

Program Suggestion:

| Week | Repetitions | Sets | Speed | Rest | Sessions /wk |
|------------|-------------|------|-------|---------|--------------|
| Intro week | 10 to16 | 2 | 212 | as need | 3 |
| 1 to 3 | 6 | 4 | 505 | 45 sec | 333 |
| 4 to 6 | 8 | 4 | 411 | 60 sec | 343 |
| 7 to 9 | 20 | 1 | 202 | 90 sec | 434 |
| 10 to 12 | 12,8,6,6 | 1 | 301 | 60 sec | 433 |

Speed refers to the decent in flexion and into extension – example: 212 equals two seconds down, 1 sec hold, and 2 seconds up.

After 4 to 6 weeks start to incorporate jumping as it progresses towards plyometric training.

Between sets visualize good skiing in your mind's eye as this will help to inspire you in your next set.

Full body movements, such as the squat, with a specific performance goal is the key to better overall performance on snow and to decrease the chances of injury. A misconception in strength type training is to focus on a specific area if it feels weak or can't endure. Muscle specific training when overall balanced strength has not been achieved, is a trap. Be careful in what you add to your program.

Additional Squat Benefits

The foundation of most movements, the squat will determine our overall health in the long term should you keep doing it. Massaging internal organs, stretching and exercising through the largest muscles (gluts, quads and hams), I am amazed today that there are still people who can bench press more than they can squat. Our inability to squat has been blamed on many things, such as a fear of getting big legs. Doing squats will provide quality to your life by putting your hips, knees and ankles through their natural ranges of motion under the force of your upper weight.

M-2 Sport Inc is located in Calgary, Alberta. www.m-2sport.ca