

# ProView

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# STRETCH OUT

for Ski Season



Photo: Don Weixl

**As a ski professional it is imperative to be physically prepared for the upcoming ski season in order to avoid injuries, and to perform better technically.**

Working in the field of sport conditioning, I hear client complaints about tightness and aches due to a lack of joint and soft tissue mobility. Many who come to me for assisted fascial stretching admit to not paying much attention to stretching on their own. For optimal safety, performance, enjoyment of the sport, and profession longevity, committing to a regular and comprehensive stretching program can be very beneficial.

## **CONTRACT and RELEASE**

Using a dynamic approach, rather than the standard stretch and hold method, I have put together a stretching program consisting of 16 exercises, to help you mobilise areas that tend to get tight due to the biomechanics of skiing.

Without too much detail, contract and release stretching techniques, such as **Active Isolated Stretching (AIS)** and **Proprioceptive Neuromuscular Facilitation (PNF)**, are based on exploiting some physiological responses of muscle relaxation to enhance the benefits of the stretch.

## **AIS vs PNF**

AIS technique requires the *opposing* muscles to contract prior to the stretch, as opposed to PNF technique which requires the *targeted* muscles to contract prior to the stretch. Both techniques are used in physical rehabilitation but are also excellent in preventing injury, as they make you stronger within your full ranges of motion. In other words, your body will be more equipped to react safely in surprising situations and save you from injury.

## **MAXIMISE your SESSION**

Keeping in mind the goals of this program, which is to maintain or increase mobility and function, the stretching phases must be synchronised with your breathing rhythm – exhale during the stretching

phase which should be about 2-4 seconds long – to stimulate the parasympathetic nervous system responsible for the body to relax and rest. To avoid the neuromuscular system going on guard and tightening up after stretching, movement in and out of each position must be smooth and pain free – only a comfortable sensation of stretching should be felt.

## **TIMING of your SESSIONS**

In general, there is no limit to how often you can stretch, as long as proper exercise form is prioritised and that you have no anatomical or medical condition that would go against stretching – if in doubt consult your doctor before starting any exercise program. Be smart with the timing of your stretching sessions. This program is ideal for the evening after skiing, on a day off, or at least a couple of hours before a workout or heading out. If your muscles are still sore from a previous day on the hill or another physical activity, make sure you perform this program at a lighter intensity.

## **MAXIMISING the BENEFITS**

Regular stretching between on-hill time, using contract and release techniques will also speed up your recovery, so you will be stronger for your next powder day or expert bumps lesson. Do yourself a favour and take at least 20 minutes 4-5 times per week to stretch properly. I suggest you do either this entire program or a portion of it – making a point of rotating through all areas. Pay attention to potential asymmetries. When you feel tighter on one side executing a particular exercise, favour that side by doing a few more repetitions or do an additional set.

## **... and THAT'S NOT ALL**

Remember that to optimise your ability to ski fast and precisely, while staying safe, also greatly depends on other aspects

of your ski season physical conditioning preparation, such as training your overall strength, power, speed, agility, balance, core stability and cardiovascular system. Calculate 4-8 weeks to begin seeing improvement in each of these fitness components. Finally, your busy lifestyle will sometimes trick you and force you to skip stretching and that is fine. Just don't give up on it.

## **Here is your program: enjoy!**

For the printed 2012-13 Season CSIA BC ProView Magazine version, we included 3 of a total 16 exercises in this electronic version.

We hope you enjoy this full version of STRETCH OUT for SKI SEASON.

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For more information about Majorie's services, including Fascial Release Therapy (a combination of assisted stretching and soft tissue mobilization techniques), visit [www.kinesiomaajo.com](http://www.kinesiomaajo.com)

#### *References:*

1. Aaron L. Mattes, *Active Isolated Stretching: The Mattes Method*, Published by Aaron L. Mattes, 20002. Ann Frederick & Chris Frederick, *Stretch to Win: Flexibility for improved speed, power and agility*, Human Kinetics, 2006
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**What?**

Mainly Rectus Abdominis, Obliques, Intercostals & Serratus Anterior

**How?**

Lean on your hand, arch comfortably and rotate your trunk externally. With other arm, reach as far away with your hand in the same direction as the trunk (keep your arm straight). Return to initial position. Repeat 8-15x until it feels looser. Change sides



**What?**  
Mainly Latissimus Dorsi, Obliques, Transverse Abdominis & Quadratus Lumborum

**How?**

Lean on your hand and bend your spine sideways into a coma shape, reaching as far away with your other hand toward the same direction. Note the hand and arm rotate externally as the movement unfolds. Return to initial position. Repeat 8-15x until it feels looser. Change sides



**What?**

Mainly Tricep Brachii

**How?**

Keep your trunk stiff and fold your arm over your head to reach as far down your back as possible. Brace the elbow with the other hand and pull backwards. Repeat 8-15x until it feels looser. Change sides



**What?**

Mainly Quadratus Lumborum, Obliques, Transverse Abdominis & Latissimus Dorsi

**How?**

Elongate the side of your body into a coma shape, by reaching up and over with your hand, and place the same side foot behind the other. Note the hand and arm rotate externally as the movement unfolds. Then side bend the spine, reaching your hand toward your foot while hiking your hip up. If you need to reach further while stretching place your foot on a book. Repeat 8-15x until it feels looser. Change sides





**What?**

Mainly Psoas, Iliacus, Tensor Fasciae Latae, Rectus Abdominis, Obliques, Intercostals & Serratus Anterior

**How?**

Squeezing your bum, lean your hip forward and reach your arm up as far as possible. Keep your arm straight and arch comfortably. To stretch further, rotate your trunk slightly outward while side-bending it toward the opposite side. Return to initial position. Repeat 8-15x until it feels looser. Change sides



**What?**  
Mainly Gluteals, Piriformis, Pectineus, Psoas Major, Iliacus, Adductors & Gracilis

**How?**  
Bring your knee toward your opposite shoulder then assist the stretching by pulling with your hands. Wiggle gently at different angles. Bring your knee away from your trunk then assist the stretching by pushing away with your hands. Repeat 8-15x until it feels looser. Change sides



**What?**  
Mainly Rectus Femoris, Vastus Lateralis, Vastus Intermedius & Vastus Medialis

**How?**  
Stiffen your trunk muscles and flex your leg (avoid arching). Then assist the stretching by pulling up on the rope. Return to initial position. Repeat 8-15x until it feels looser. Change sides







**What?**

Mainly Gluteals, Vastus Lateralis, Tensor Fasciae Latae & Iliotibial Band

**How?**

Keep your back flat on the ground, cross your leg between 7 and 9 o'clock (right leg) and 5 and 3 o'clock (left leg). Note that the exercising leg is kept externally rotated and slightly bent at a fixed angle. Assist the stretching by pulling on the rope. Return to initial position. Repeat 8-15x until it feels looser. Change sides



**What?**

Mainly Adductors, Pectineus & Gracilis

**How?**

Open your leg sideways plus pull on the rope to assist the stretch. Return to initial position. Repeat 8-15x until it feels looser. Change sides





**What?**

Mainly Bicep Femoris,  
Semimembranosus,  
Semitendinosus & Popliteus

**How?**

Bring your leg as far up as possible then pull on the rope to assist the stretch. Return to initial position. Repeat 5-10x in a row for each angle suggested here – It should feel easier as you go. Change sides



**What?**

Mainly Gastrocnemius, Soleus, Peroneus & Tibialis Posterior

**How?**

Keep a straight back, bring your toes toward your chest then stretch further by pulling on the rope. Return to initial position. Repeat 8-15x until it feels looser. Finish off by alternatively pulling gently on the inside and outside ends of the rope, to invert and evert the foot. Repeat 8-12x until it loosens up. Change sides



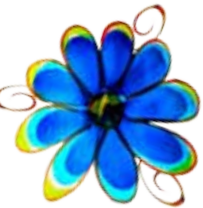


**What?**

Mainly Teres Minor, Infraspinatus & Supraspinatus

**How?**

Internally rotate the arm then gently press down to reach further while stretching. Return to initial position. Repeat 8-15x until it feels looser. Change sides



**What?**

Mainly Pectoralis, Coracobrachialis & Subscapularis

**How?**

Slowly drop the chest and front of shoulder area toward the ground to feel a stretch. Then contract the muscles back by pushing your elbow into the chair. Try at different angles with varying your elbow at 2, 3 and 4 o'clock (right arm) and at 10, 9 and 8 o'clock (left arm). Repeat 10-15x in total until it feels looser. Change sides



**What?**

Mainly Pectoralis Major, Teres Major & Subscapularis

**How?**

Tighten to stabilise hip area and pivot backward until a stretch is felt. Then internally rotate the arm creating a force against the tree (or the door frame). Repeat 8-15x until it feels looser. Change sides





**What?**

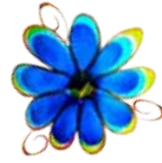
Mainly Upper Trapezius, Levator Scapula, Upper Erector Spinaes, Splenius, Semispinalis & Posterior Scalene

**How?**

With your straight arm leaning on a tree (or a door frame), slowly drop the shoulder blade and bring your nose toward your opposite arm pit. Return into initial position. Repeat 5-10x until it feels looser. Change sides







**What?**

*Mainly Latissimus Dorsi, Teres Minor, Infraspinatus, Rhomboideus, Serratus Posteriors, Quadratus Lumborum, Erector Spinaes, Rotatores & Multifidi*

**How?**

*Reach your hand forward to grab onto a post (or a door frame) and lean against it to feel a stretch.*

*Then return to erect posture while reaching your elbow back. Repeat 8-15x until it feels looser.*

*Change sides*

*NOTE: Play with the arm height and the hip position.*





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