Trail Training

Strengthen your back, core and legs in a pre trip workout, primarily targeted for backpackers getting ready to hit the trail.

By: Tim Neumann - Soft Lite Studios

The Premise

I want you to consider, if you will, the difference between a leisurely hike in the local woods versus a backcountry experience loaded with full pack and hiking gear. Each one represents a different level of effort to be sure, additionally each one relies upon a wholly different set of muscles in the process.

Before heading out on your next backcountry adventure, loaded up with camera gear and essential supplies, take a little time to read the following and engage in a pre-trip workout regimen that will no doubt make your upcoming workshop / backcountry experience safer, easier and more enjoyable. A little strength training, cardiovascular conditioning and all around stamina building will most definitely pay off.

It is a common mistake, to assume that frequent long distance, light hikes or even running experience makes one ideally prepared for backpack based hiking. When under heavier than normal loads, in more than normally inclined conditions than you are used to, you are working a whole new set of muscles. Muscles that might well benefit from a little conditioning before setting out into the backcountry toting additional weight.

Working these unique muscles requires a targeted exercise regimen, which I layout in the paragraphs and instructions that follow. I am a big fan of single leg movements, primarily because they develop balance and correspondingly better core strength and stability. Additionally, single leg movements easily identify disparities in leg strength and help to target focus on the weaker leg when needed.

The following workout, designed as a full body approach, hits every major muscle group typically utilized in backpacking. At the same time the workout addresses coordination and core strength, as well as promotes cardiovascular endurance. These exercises, done in sets as recommended can be done two (2) to three (3) times per week in addition to a mileage based hiking plan.

Don't forget, in your overall backcountry preparation, to add in ramp-up hiking with longer, steeper inclines while under backpack loads. Even for non-backpackers and periods between trip preparations, this workout can provide excellent cross training benefits and improved core strength and balance.

The Workout

Perform the exercises listed below, in circuit style, starting with exercise (1) and continuing through to and completing exercise (6). Once you have completed the circuit, start over at exercise (1) and complete the circuit two more times.

When you are working through the exercises, try to keep in mind that good form makes each exercise more effective. Favor form over speed and take rests as necessary to complete each exercise and each set with correct form.

(1) Step-Ups

The uphill portion of the hike is where many people, even some seasoned runners and athletes, are challenged the most. This exercise will prepare your calves, hamstrings and gluteus muscles for those uphill grades.

> **Step-Ups**
>
> - Use a step-up box that is somewhere in the range of 6" to 18" in height. Face the box and lift your left foot off of the ground and place it firmly on the box.
> - Exhale your breath and engage your core muscles. With your left leg, drive through your left foot and step up onto the box, drawing your left leg up straight. To complete the motion, draw your right knee up to hip height and inhale.
> - Exhale your breath as your slowly reverse the movement, over a two count, to the position in which you first started, with your right foot again firmly planted on the floor.
> - Repeat exercise 12 times on each side (left leg then right leg).
>
> **Decrease the effort:** Perform exercise on a shorter step. **Increase the effort:** Use a taller step and / or hold some weight (dumbbell or backpack)

(2) Shoveling Snow

You'll be putting your pack on and off frequently and this little exercise works all the muscles used in that repetitive maneuver. In addition to working all the muscles in the lower body and the core, the movements in this exercise also work a number of muscles in the upper body at the same time.

> **Shoveling Snow**
>
> - Place your feet on each side of a sizable dumbbell, medicine ball or kettle bell.
> - As you inhale, bend at the knees and push your hips backward so that you are squatting over the weight.
> - Grab ahold of the weight with both hands, making sure you keep your chest up and your eyes facing forward.
> - Exhale and engage your core muscles, then pick up the weight vertically and pull it towards your left

shoulder as you rotate about your waist and mid-back, while keeping your torso vertical. Inhale as you reverse the movement, again squatting to allow for placement of the weight back to where it was originally located. Repeat the movement, this time rotating the weight towards your right shoulder. Continue the exercise, alternating to every other side (left and right), until you have completed 12 repetitions, including each side in a repetition.

Decrease the effort: User a lighter weight **Increase the effort:** Use a heavier weight

(3) Step-Downs (Reverse Step-Up)

You would think going downhill would be, well, all downhill. But on steep inclines it's more stressful on certain muscle groups than you would think. Recent studies show that you can expend almost three (3) time as much energy going downhill as you doing going uphill. Which to many is very surprising because it doesn't feel nearly as tiring. In support of this observation, a 2007 Journal of Sport Sciences study showed that 3 days after a 30-minute downhill run, subjects had shorter strides, less range of motion and muscle damage.

Here's the science: Each descending step requires a so-called eccentric contraction, where you're actually lengthening your quad muscles as you contract them (also known as "negatives by weightlifters). This exercise prepares the quadriceps and other muscles for those downward pitches.

Step-Downs

- Use a step-up box that is somewhere in the range of 6" to 12" in height. Facing away from the step-up box, transfer your body weight to your right foot and place the toes of your left foot up onto the box behind you.
- As you exhale, shift your body weight to your left foot, at the same time lowering to the ball of that foot and pressing yourself into an upright position upon the step-up platform.
- Continuing the flow of movement from the previous step, raise you right knee up to hip level and lower the heel of your left foot, so that your foot is flat upon the step-up platform.
- As your reach a position where you left leg is fully straightened pause in that position while inhaling.
    - Exhale as you reverse the movement, lowering your right leg back to the floor, as you bend your left leg and flexing back up upon the toes of your left foot.
- Repeat exercise 12 times on each side (left leg then right leg).

Decrease the effort: Perform exercise on a shorter step. **Increase the effort:** Use a taller step and / or hold weight (dumbbell or backpack).

(4) Rotational Planks

Carrying a loaded backpack can clearly place additional load on your body. This exercise specifically

addresses that additional load by strengthening those muscles that are most directly effected by additional, sustained weighting.

> **Rotational Planks**
>
> - This exercise starts off with the body in the plank position, on the palms of your hands, with your wrists vertically under your shoulders. Keep your feet just slightly wider than your hips.
> - As you exhale, lift your left hand off the ground and slowly rotate the left side of your body upward. Extend this rotation until your left arm is pointing towards the ceiling and your chest is perpendicular to the ground. Keep your arm straight, but not locked.
> - Inhale as you reverse this movement and slowly return your body, arm and hand to their starting positions.
> - Repeat the motion using the opposite arm and rotating your chest upward from the opposite side.
> - Repeat the steps above for a total of six repetitions, total six rotations on your left side and six rotations on your right side.
>
> **Decrease the effort:** Adopt a wider foot stance, lift one hand at a time and tap the alternate shoulder, avoiding the body rotation. **Increase the effort:** Perform a push-up between side lift and rotates.

(5) Calf Raises

Prepare your calves and ankles for those uphill portions of the hike as well as the extra load of your backpack. This exercise will help to provide some necessary conditioning to those lower legs muscles.

> **Calf Raises**
>
> - Stand on a step-up platform, with only the balls of your feet upon the platform and your heels hovering out over the edge. The height of the platform only matters in as much as your heels shouldn't be able to touch the floor during the exercise.
> - Exhale and using a two count, slowly raise your entire body up onto your tiptoes, extending upwards as far as possible.
> - Inhale and using a two count, slowly lower your heels back to their previous starting position.
> - Repeat exercise 12 times.
>
> **Decrease the effort:** Utilize some form of support to stabilize your core and upper body. **Increase the effort:** Hold a dumbbell or wear your backpack and / or perform the exercise unilaterally, doing raises with one (1) foot at a time (repeating 12 times for each foot).

(6) Bent-Over Rows (Single Arm)

Throughout the course of your backcountry experience not only will you be donning and doffing your pack

multiple times, but your back will be subjected to carrying that weight for an extended period of time. This exercise will help reinforce the muscles used by this increased, long term load.

> **Bent-Over Rows (Single Arm)**
>
> - In a staggered stance, with one foot forward of the other, hold a dumbbell in the hand opposite the forward foot
> - Rest your free hand on your forward knee, or on your support surface if you are using one.
> - Engage your core and keep your back flat.
> - Exhale as you pull the dumbbell upward towards your body, while at the same time squeezing your shoulder blade towards the middle of your back.
> - Inhale as you slowly lower the dumbbell to its original position, keeping the motion smooth and controlled.
> - Repeat 12 times, switch and repeat on right side 12 times.
>
> **Decrease the effort:** Use a bench to support your body weight. **Increase the effort:** Increase the dumbbell weight.