



Mount Shasta Training Guide



Disclaimer of Responsibility

The material within this program is provided solely as general educational and informational purposes. Use of this program, advice and information contained herein is at the sole choice and risk of the reader. Always consult your physician or healthcare provider before beginning any nutrition or exercise program. By using any part of this training plan you are agreeing to accept full responsibility for your decisions and agreeing to hold harmless Casaval Personal Training LLC, its agents, clients, contractors, and any affiliated companies from any liability with respect to injury, illness, or loss to you or your property arising out of or connected with your use of the information contained within this program.

Table of Contents

<u>Introduction</u>	<u>3</u>
<u>Using this Training Plan</u>	<u>4</u>
<u>Planning Hikes Based on Elevation Gain</u>	<u>6</u>
<u>Example Training Schedules</u>	<u>7</u>
<u>Workout Menu</u>	<u>8</u>
<u>To a Safe, Fun, and Successful Climb!</u>	<u>15</u>

Why Train Before Your Climb?

"Without a doubt, the best indicator of success in the mountains is to be as physically prepared as possible. For many climbers, it's difficult to quantify the efforts of mountaineering and to develop a training program to meet the demands of a big Cascade peak like Mt. Shasta. With Dane's experience guiding and his deep knowledge base, he is a tremendous resource for those seeking to expand their capabilities. A regimented training program will not only increase your chance of achieving your goals, but you'll have a much more enjoyable time while doing it."

Chris Carr
Shasta Mountain Guides

Click the image to see a
one-minute video



[Follow this link for more info about becoming a Casaval Athlete.](#)

Introduction

Mountaineering is much more demanding than hiking or backpacking. It requires a high level of fitness and skilled movement in various terrain. Even in the best conditions, climbing Mount Shasta is a physical and mental challenge.

This training plan can help you achieve the level of fitness needed to have a safe, fun, and successful climb of Mount Shasta.

This plan works because it meets the demands of mountaineering—each detail of this sport-specific training program is intentional.

The training plan will work best for athletes training 5-6 days per week for 8-16 weeks. But, of course, life can get hectic with work and families, so don't stress about hitting that goal perfectly. Stress doesn't help the process. Do the best you can. Read the workout instructions carefully to customize your training plan. Start fairly easily and gradually progress workouts from week to week and you can be confident that your training will work.

This Mount Shasta Training Plan is designed to be flexible. It's recommended that you start your training at least several weeks before your climb. To make it easy for you to understand and plan your training, this document includes a recommended elevation gain progression, structured workouts, and example training schedules.

The workouts on the sample training weeks are hyperlinked and color-coded to corresponding workout cards at the end of this training plan. Each colored workout card contains detailed instructions and suggestions for customizing your plan.

Each exercise mentioned in this training plan is linked to a guidance video. Click or tap the name of any movement to access a short demonstration video.

Thank you for using this Mount Shasta training plan. There's quite a lot of work ahead, so you should take it one workout at a time. You don't need to be a super-athlete to complete this training plan. Do your best to train consistently, and you will gain your team's and your guides' confidence. Showing up in good shape will provide a safer, more enjoyable, and higher-quality experience on the mountain.

I hope you enjoy the training process leading up to your climb. My name is Dane Brinkley, I founded Casaval Personal Training specifically to help prepare climbers like you for Mount Shasta. Please get in touch with me if there's anything I can do to help with your training.

Kind Regards,

Dane Brinkley
dane@casavalpt.com

Using the Training Plan

Participating in any training program includes risks of injury and burnout. Both can be major setbacks that could derail your training. Careful self-monitoring and a few good habits can keep you healthy and safe. Here are a few nuggets that might help you train well and avoid injury.

Be Consistent

If you want to see great results from training, you must train often. Your body will adapt more quickly if you can complete your workouts on a regular training schedule.

Warm Up First

Warming up is essential to increase your body temperature, respiratory rate, and heart rate to supply your muscles with fresh, oxygen-rich blood. Your warm-ups also provide mental focus through concentration and visualization. You'll perform better after a good warm-up.

Make it Look Easy

You shouldn't finish workouts feeling nauseous, dizzy, or flattened from exhaustion. Despite what pop-fitness culture tells us, training with extreme intensity is nothing but a shortcut to fitness plateaus and injury. Your workouts should positively challenge you and leave you with just a little gas in the tank. Even during higher-intensity training, work hard without beating yourself down.

Training Weakens, and Recovery Strengthens

Good recovery practices are critical to gaining fitness. Get 7-8 hours of sleep each night, drink lots of water, and feed your body plenty of nutritious and protein-rich foods. Other strategies to promote recovery are easy aerobic exercise, stretching, massage, foam rolling, hot/cold therapies, and limiting alcohol and sugar consumption. If you're not recovering well, you'll not gain much fitness, and you'll be at greater risk of injury and burnout.

Listen to Your Body

You must listen to your body and your intuition. If something doesn't feel right, don't push it; your body usually tries to tell you when something isn't working. Muscle soreness is natural when beginning a new program, but joint or bone pain are signs you've been overdoing it. Extreme fatigue and poor mood are also signs of overtraining that often precede the first symptoms of illness. Scale back or skip workouts before you experience these warning signs. Training through injuries or illness will only set you back further.



Take Ownership of Your Strength Workouts

Regularly completing your strength workouts will make you more confident and resistant to injury. You'll improve your body composition and strength-to-weight ratio, essential attributes for a mountaineer.

You'll progress further and more quickly if you focus on proper form. Athletes who use good form recruit more muscle fibers, build more robust neurological pathways, and protect themselves from injury. "Form over force" is one of our mantras, so when you begin a workout, ensure you master the movement before adding weight.

The strength workouts below will suit a wide range of athletes. Early in your training, the workouts can help you correct deficiencies and increase your general full-body strength.

Later in the program, strength workouts should focus on maximizing your strength potential and motor-skill development specific to climbing. The strength workouts include a battery of exercises that mimic or complement the movement patterns used in training and climbing.

Follow the instructions in the workouts and choose the exercises that are best for your current strength and mobility. As you gain strength, the exercises will become easier and you can add resistance or choose more challenging exercises.

You can do the strength workouts at home, in a gym, and outdoors. The only pieces of equipment you'll need are:

- A weighted backpack
- A step or box 12-16" high (for box steps)
- A floor mat for core exercises

You can use water jugs and rocks to add weight to your backpack. You can use stumps, rocks, and logs in place of your step or box if you're training outdoors. With a bit of creativity, you can get the work done anywhere.

In addition to the gear listed above, you can use optional gym equipment such as a pull-up bar, free weights, a weight bench, a weight vest, ankle weights, and a short step 3-6" high.

Prioritize Aerobic Training

Improving your aerobic fitness with weight bearing exercises should be a priority if you're to climb your best. You will improve your endurance by training your aerobic system frequently and consistently each week.

Because your goal is to climb Mount Shasta, you should spend most training hours hiking up and down hills to prepare your body for the energy demands of mountaineering.

You'll also want to incorporate some easy aerobic training to help you recover from your hill work, long hikes, and hard strength workouts.

Plan Your Training Hikes Based on Elevation Gain Rather than Mileage

Summiting Mount Shasta requires just over 7,000 feet of elevation gain and loss on foot over one to three days.

When training to climb a steep mountain, vertical elevation gain is more critical than mileage. Planning your training hikes based on vertical elevation gain is best.

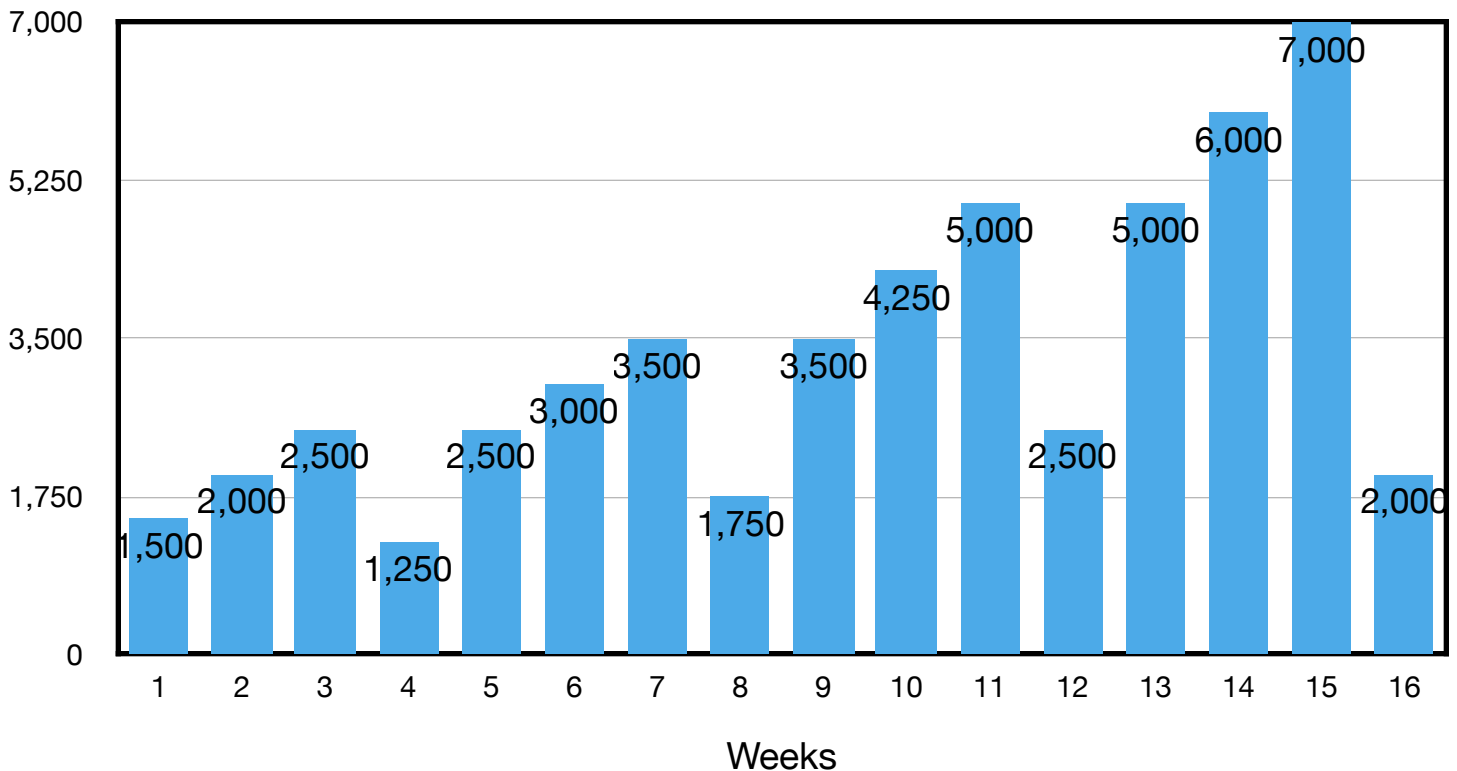
If you live in an area without access to tall hills or mountains, you can achieve the recommended elevation gain by doing hill repeats. For instance, if the highest hill you have nearby is only 1000', you can repeat the hike 3.5 times to get to a 3500' goal. Alternatively you can use a treadmill set to an incline, a stair climbing machine, and even simple box stepping.

The 16-week vertical elevation gain progression here can be a powerful tool for your success. Aim to cover your weekly vertical gain over the course of 2-3 training hikes.

This doesn't have to be perfect. Simply focus on incorporating steep travel and elevation gain in your training hikes and gradually increase your vertical gain most weeks. Every 4th week in the table below shows a reduction in vertical gain to coincide with easier recovery weeks.

This is an example of an increasing uphill workload that can help prepare your body for the 7,000' required to climb Mount Shasta.

16 Week Vertical Elevation Gain Progression (Feet)



Example Training Schedules

The weekly training schedules below are simple examples of how you might lay out your workouts. Your training schedule may look different depending on your training availability and starting fitness. Refer to the details on each workout card for more guidance and recommendations.

Sample Early Stage Training Schedule (first 4-8 weeks)						
Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Rest Day w/ Active Recovery	General Full Body Strength Workout	Walk or Jog in Flat Terrain • 1 Hour • Low Intensity	Core & Cardio Workout	General Full Body Strength Workout	Hike or Jog in Rolling Terrain • 1-2 Hours • 500-1000' Gain • Moderate Intensity	Long Endurance Hike • 2-4 Hours • 1000-2500' Gain • 5-10# Pack • Low Intensity

Sample Late Stage Training Schedule (i.e. final 4-8 weeks)						
Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Rest Day w/ Active Recovery	Mountain Strength Workout	Hike or Jog in Rolling Terrain • 1-2 Hours • 500-1000' Gain • Moderate Intensity	Core & Cardio Workout	Walk or Jog in Flat Terrain • 1 Hour • Low Intensity	Steep Hill Climb • 1-3 Hours • 500-2000' Gain • 25-50# Pack • High Intensity	Long Endurance Hike • 3-6 Hours • 2500-4000' Gain • 15-20# Pack • Low Intensity

Sample Recovery Week Schedule (every 3-4 weeks)						
Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Rest Day w/ Active Recovery	Core & Cardio Workout	Walk or Jog in Flat Terrain • 1 Hour • Low Intensity	Hike or Jog in Rolling Terrain • 1-2 Hours • 500-1000' Gain • Moderate Intensity	Rest Day w/ Active Recovery	Walk or Jog in Flat Terrain • 1 Hour • Low Intensity	Long Endurance Hike • 1-3 Hours • 1000-2000' Gain • 10-15# Pack • Low Intensity

Workout Menu

- Long Endurance Hike
- Hike or Jog in Rolling Terrain
- Walk or Jog in Flat Terrain
- General Full Body Strength
- Core + Cardio
- Steep Hill Climb
- Mountain Strength
- Active Recovery

Long Endurance Hike

Low-Intensity

Mountaineering ability comes down to your capacity for low-intensity uphill and downhill travel on foot. Longer, low-intensity hiking is essential to develop your endurance and efficiency in mountainous terrain.

This workout should progress with increasing duration, vertical elevation gain, and backpack weight.

Each week, choose a steep route (10-15% grade) based on your goal for vertical elevation gain. Hike steadily at low intensity for the duration of the workout. You should be able to speak in complete sentences. Slow your pace when needed to maintain a very steady effort.

Use poles, a backpack, and heavier footwear if possible.

Move continuously for periods 1 hour or longer and keep breaks very brief.

When your hikes become longer than two hours, begin to practice feeding and hydrating each hour.

Your effort should be a 5/10. It should be most relaxed, and you should feel tired by the duration, not the intensity.

Training on a Treadmill

Suppose you're training indoors; set a treadmill to 10-15% and hike until you've achieved your goal for vertical elevation. When set to 10%, 2 miles equals about 1000'. At 15%, 2 miles equals ~1500'. Consider dividing longer treadmill workouts in half and completing the first half in the morning and the second half later in the day.

Training Outdoors on Flatter Terrain

You'll have to get creative if you don't have access to steeper terrain or have limited options for elevation gain. It is helpful to repeat laps on the most vertical sections of a trail or incorporate laps on stairs. If your terrain is flat, include box steps before, during, and after your hike to accumulate vertical gain. Logs, stumps, and rocks can all work well for box stepping. You can even bring your box or step to the trailhead. That way, you can start and end an otherwise flat hike with elevation gain.

Hike or Jog in Rolling Terrain

Moderate-Intensity

Great endurance relies on the body's ability to utilize oxygen. Use this workout 1-3 times per week throughout your training to improve your aerobic capacity.

Steady training at moderate intensities recruits and trains your aerobic capacity and a mix of slow twitch and fast muscle fibers used during long endurance efforts.

Choose a route that meets your goal for vertical elevation. Hike or jog at a medium pace for the duration of the workout. Start slowly to warm up, then maintain a steady effort and intensity throughout the workout. At the proper intensity, you should still be able to speak in complete sentences. Try to move as swiftly as you can at this moderate intensity. Carry little or no weight.

A rolling trail is best, but a neighborhood or city hike/jog can work if the sidewalks and streets are steep enough. If you're doing this workout indoors, use a treadmill set to ~8%. You can substitute laps on stairs or box stepping if no other option exists.

Allow your pace to match the terrain changes by slowing your speed on the uphill sections and accelerating on the downhill. Modulating your speed will help you maintain a constant and steady effort. Your exertion should be about 6/10, and you should feel muscle fatigue only at the end of the workout. Finish this workout invigorated, not exhausted.

Walk or Jog in Flat Terrain

Low-Intensity

This low-intensity workout is essential for building and maintaining aerobic fitness and recovering from more strenuous efforts.

Increasing heart and respiratory rates during easy exercise stimulate an aerobic training effect and supply muscles throughout the body with oxygen and nutrient-rich blood.

Choose a flat course and walk or jog at a leisurely and steady pace for the duration of the workout. Your effort should be about 4/10.

You'll know you're recovering well between strenuous efforts if it feels easy and relaxed. If it feels more challenging than usual, it might be time to dial back the intensity for a few days.

General Full Body Strength Workout

Once to Twice Per Week

Warm Up

Choose one (or a combination of a few) of the exercises below to warm up for 10 minutes.

<u>Low Box Stepping</u>	<u>Jumping Jack</u>
<u>Jump Rope</u>	<u>Jog in Place</u>
<u>Uphill Treadmill Walk</u>	<u>High Knees</u>
<u>Power Walk or Jog</u>	<u>Butt Kicks</u>

Dynamic Stretch

Choose *THREE* of the stretches below. Perform your three stretches for 30-60 seconds each.

<u>Lying Knee to Chest Pulls</u>	<u>Walking Quad Stretch</u>
<u>Couch Stretch</u>	<u>Alternating Knee to Chest</u>
<u>Half-Kneeling Windmill</u>	<u>Leg Swings</u>
<u>Worlds Greatest</u>	<u>Arm Circles</u>

General Strength Supersets

For each superset choose *ONE* exercise from row A and *ONE* from row B. Perform 5-10 reps of exercise A, rest 30-60 seconds, then perform 5-10 reps of exercise B. Repeat each of your supersets 2-4 times.

Superset 1: Plyo/Agility

- A) Calf Hop—Single Leg Calf Hop—For/Aft Hops—Single Leg For/Aft
B) Lateral Bound—Lateral Hop—Single Leg Lat Hop—Rebound Jumps

Superset 2: Lower Body Push/Upper Body Pull

- A) Box Squat—BW Squat—BP Front Squat—Goblet Squat—DB Front Squat
B) Bent-over Row—Single-arm Bent Row—Upright Row—Inverted Row—Pull-Up

Superset 3: Lower Body Pull/Upper Body Push

- A) Hamstring Bridge—Single Leg Hamstring Bridge—Elevated Ham Bridge—BP RDL—DB RDL
B) Inclined Push-up—Push-up—Chair Dips—Bench Dips—Declined Push-up

Superset 4: Core/Accessory

- A) Sit up—Flutter Kick—Crunch—Reverse Crunch—Hanging Knee Raise
B) Calf Raise—Single Leg Calf Raise—Dead Hang (15-60 seconds)

Cool Down/Reset

Choose *THREE* of the stretches below. Hold each of your stretches for 10-30 seconds.

<u>Half Kneeling Windmill</u>	<u>Side Lying Quad Stretch</u>
<u>Couch Stretch</u>	<u>Standing Quad Stretch</u>
<u>Lying Hamstring Stretch</u>	<u>Worlds Greatest</u>
<u>Sitting Hamstring Stretch</u>	<u>Calf Stretch</u>

Core + Cardio Workout

One to Three Times Per Week

Warm Up

Choose one (or a combination of a few) of the exercises below to warm up for 10 minutes.

Low Box Stepping

Jump Rope

Uphill Treadmill Walk

Power Walk or Jog

Jumping Jack

Jog in Place

High Knees

Butt Kicks

Dynamic Stretch

Choose *THREE* of the stretches below. Perform your three stretches for 30-60 seconds each.

Lying Knee to Chest Pulls

Couch Stretch

Half-Kneeling Windmill

Worlds Greatest

Walking Quad Stretch

Alternating Knee to Chest

Leg Swings

Arm Circles

Core Circuit

Choose *FOUR* core exercises from the list below that challenge you in a positive way. Complete 6-12 reps of each of your four exercises in a circuit. Repeat the circuit 3-6 times. Change or progress your exercises every 4-6 weeks.

Crunch

Plank

Bird Dog

Side Bridge

Windshield Wiper

Flutter Kick

Reverse Crunch

Lying Leg Raise

Hanging Knee Raise

KB Swing

Side Crunch

Dead Bug

Bear Crawl

Dead Hang

Walking Plank

Kayaker

Turkish Get Ups

Half-Kneeling Windmill

Short Aerobic Workout

Jog, power-walk, cycle, or use any cardio machine for 20-30 minutes at a moderate intensity.

Cool Down/Reset

Choose *THREE* of the stretches below. Hold each of your stretches for 10-30 seconds.

Half Kneeling Windmill

Couch Stretch

Lying Hamstring Stretch

Sitting Hamstring Stretch

Side Lying Quad Stretch

Standing Quad Stretch

Worlds Greatest

Calf Stretch

Steep Hill Climb

High Intensity

This higher-intensity workout trains your aerobic power and strength endurance for climbing mountains. It is not a typical "hike." The Hill Climb should be much more challenging than your usual training hikes. You must seek out the steepest terrain available.

Few trails are steep enough for this workout, so your best option might be an off-trail training hill, stairs, a StairMaster, a treadmill set to 15%, or box-stepping on a 12-16" step.

Use this workout once per week after you've developed the fitness for very steep and sustained uphill hiking.

The Hill Climb progresses with increasing vertical elevation gain and backpack weight. For the first few workouts, you're encouraged only to use body weight so that your breathing is the most significant limiting factor. Once you're feeling ready, begin wearing a heavy backpack to overload your muscles so that your legs are the limiting factor.

Outdoors

Use poles. Warm up for 15-20 minutes in flat terrain, then power-hike your "training hill" at a challenging yet sustainable pace until you've achieved your goal for elevation gain. Cool down by hiking back down your hill. You may complete your goal for elevation gain with one push up a long steep climb or repeat laps on a shorter climb. Use any downhill travel to recover between strenuous climbing efforts.

Treadmill

Warm up for 15 minutes with the incline set flat. Then, ramp up the treadmill to 15% and hike until you've achieved your goal for vertical elevation. Once you've finished the climb, cool down on a flat treadmill for another 15-20 minutes.

Tip: Train yourself not to hold on to the handles; swing your arms as if walking normally. At 15%, 2 miles equals ~1500'.

StairMaster

Warm up for 15 minutes by walking on flat terrain or a treadmill. Then, move to the StairMaster and hike until you've achieved your goal for vertical elevation. Once you've finished the climb, cool down on flat terrain for another 15-20 minutes.

Tip: Train yourself not to hold on to the handles; only touch them for balance if needed. Each floor climbed equals ~10' (100 floors = 1000').

Box Stepping

Warm up for 15 minutes by walking on flat terrain. Then, begin box stepping on a 12-16" box or step. You may use sets of 50-100 alternating box steps until you've achieved your goal for vertical elevation, but keep rests very brief between sets. Cool down with another 15-20 minutes of flat walking or jogging.

Tip: A 12" box or step makes it easy to calculate vertical gain. One step equals one foot of climbing.

Mountain Strength Workout

Once to Twice Per Week

Warm Up

Choose one (or a combination of a few) of the exercises below to warm up for 10 minutes.

<u>Low Box Stepping</u>	<u>Jumping Jack</u>
<u>Jump Rope</u>	<u>Jog in Place</u>
<u>Uphill Treadmill Walk</u>	<u>High Knees</u>
<u>Power Walk or Jog</u>	<u>Butt Kicks</u>

Dynamic Stretch

Choose *THREE* of the stretches below. Perform your three stretches for 30-60 seconds each.

<u>Lying Knee to Chest Pulls</u>	<u>Walking Quad Stretch</u>
<u>Couch Stretch</u>	<u>Alternating Knee to Chest</u>
<u>Half-Kneeling Windmill</u>	<u>Leg Swings</u>
<u>Worlds Greatest</u>	<u>Arm Circles</u>

Mountaineering Strength Supersets

For each superset choose *ONE* exercise from row A and *ONE* from row B. Perform 5-10 reps of exercise A, rest 30-60 seconds, then perform 5-10 reps of exercise B. Repeat each of your supersets 2-4 times.

Superset 1: Plyo/Agility

- A) Half Squat Hop—Squat Jump—Split Squat Hop—Jumping Lunge—Box Jump
B) Lateral Barrier Jumps—Low Box Shuffle—Lateral Box Jumps

Superset 2: Box Step/Upper Body Push

- A) Low Box Step—Box Step
B) Inclined Push-up—Push-up—Chair Dips—Bench Dips—Declined Push-up

Superset 3: Single Leg Push/Upper Body Pull

- A) Split Squat—Lunge—Single Leg Split Squat
B) Bent-over Row—Single-arm Bent Row—Upright Row—Inverted Row—Pull-Up

Superset 4: Squat/Accessory

- A) BP Front Squat—Goblet Squat—DB Front Squat
B) BP RDL—DB RDL—Single Leg Calf Raise—Hanging Knee Raise—Dead Hang

Cool Down/Reset

Choose *THREE* of the stretches below. Hold each of your stretches for 10-30 seconds.

<u>Half Kneeling Windmill</u>	<u>Side Lying Quad Stretch</u>
<u>Couch Stretch</u>	<u>Standing Quad Stretch</u>
<u>Lying Hamstring Stretch</u>	<u>Worlds Greatest</u>
<u>Sitting Hamstring Stretch</u>	<u>Calf Stretch</u>

Active Recovery

One to Two Activities Per Week

The routines below will all support recovery and mobility. There's something here for almost anyone so choose your own adventure and have fun.

10-minute Full Body Stretch



8-minute Hip Mobility Sequence



30-minute Easy Yoga



15-minute Full Body Stretch



20-minute Foam Rolling Routine



10-minute Hip Mobility Routine



To a Safe, Fun, and Successful Climb!

Congratulations, and excellent job deciding to climb Mount Shasta. Few people choose such rigorous goals. You're an inspiration, and I'm thrilled to have the chance to be a small part of your endeavor.

My colleagues and I love to help people achieve their goals; that's why most of us do what we do. As a trainer and guide, I'm always looking for ways to help set up athletes and guests for success with clear expectations and proper preparation.

Please reach out if you have any questions about this training guide. I'm on your team and dedicated to your success.

I'd be happy to add you to the small roster of athletes I coach and train remotely. You are welcome to email me any time at dane@casavalpt.com. Thanks again, and best of luck with your training and your climb!

Dane Brinkley
Trainer & Coach
Casaval Personal Training