# INTRODUCTION

#### TRAINING SAVES TIME

Finally, a third reason to train is that it simply takes less time. The systematic nature of training makes it the most efficient way to completely and thoroughly exercise. Nothing is more *inefficient*, in terms of time, than climbing an assortment of routes at the crag in hopes of fatiguing all of the relevant muscle groups in order to stimulate adaptation. If it were even possible to reach total exhaustion with this "just climb" approach, it's fair to say that it would require several more hours per session. Through systematic training, weak areas that need stimulation can be precisely identified, and the appropriate stress can be applied exactly where needed with very little wasted time and effort. Every grip position can be precisely stressed to failure in less than 90 minutes with the proper equipment and a well-designed program. Plus it can be done without a partner, at the gym or at home, any time, any day, regardless of weather, work schedules, etc. Good luck getting that at the crag! For those who don't have 40 hours per week to climb, training is by far the most time-efficient way to improve; for working adults with families, it's the only way to improve.

#### TIME VALUE OF CLIMBING ABILITY

Economists use the concept of Time Value of Money to explain the benefits of financial investment, and a similar case can be made for the benefits of training. The concept is that \$100 invested today will be worth \$105 a year from now, assuming an annual net interest rate of 5 percent, at which time the investor will have more buying power than he has today. There is a similar Time Value of Climbing Ability, in that *time* invested today in improving climbing ability will yield more sending-power in the future.

For example, consider a climber who consistently redpoints 5.12c in six tries, 5.12b in three tries, and onsights 5.12a about 50 percent of the time. Supposing she gets three quality redpoint attempts per climbing day, she should be able to redpoint a given 5.12c in two days of effort. If she saves a few climbing days each month to invest in following a structured training program, in a year she might be redpointing 5.12d in six tries, 5.12c in three tries, and onsighting 5.12b about 50 percent of the time. The two days she required to climb *one* 5.12c a year ago will now get her *two* 5.12c routes — more *sending-power* and a great return on her initial investment.

Many climbers skip training because they are so eager to climb every waking moment that they can't see past the routes right in front of them. However, a small up-front investment of time and effort toward training will yield improvement that will easily make up for the temporary delay in the immediate pursuit of sends. Granted, this analysis is simplistic; quality of life is not measured simply in terms of number of sends per day, and a harder send is not necessarily "better." However, taking the long view and accepting that every climber's time is limited, why not create the option that makes the most of that time? A training program that provides steady, reliable improvement is the best way to maximize climbing potential over a lifetime.

### Training is for You!

Many climbers lead hectic lives, and so believe they lack the time to train due to other commitments, be they a stressful job, family, school, or other pursuit. The approach proposed here is ideal for these climbers because it offers the most time-efficient training program available. With the myriad climbing exercises out there, and the volume of activities going on at a local gym, it would be easy to assume training requires a lot of time, but it doesn't have to. This book describes a number of "luxury" exercises and activities so that those with extra time can strive to master their craft, but these activities are not intended for everyone. The most essential activities will be clearly identified so they can be prioritized to achieve the greatest possible benefit commensurate with the amount of time committed. The most critical exercises are training dense, packing a great deal of training stimulus into short time periods, yielding maximum improvement with the least cost to everyday life. What's more, most are possible to do at home, any time of day, so the lengthy commute to an elaborate climbing gym can be avoided. Those who feel that they are too busy to train may in fact be too busy *not* to train! For the very busy, what little time is available for climbing is that much more precious, and so it is that much more critical to make the most of that time.

### MANY PATHS, BUT THIS ONE WORKS FOR MANY PEOPLE

When studying the training and climbing habits of elite climbers, it becomes apparent that there are many paths to success in rock climbing. If the world's 100 best climbers were asked how to train, there would be 100 unique answers. Some train like fiends, eight hours per day, seven days a week, to reach the same fitness level as those who simply "go climbing" a few days per week. The reasons for these disparities may

## Family, Career, and Climbing — Is it Possible to Have It All?

In a perfect world we would all have 20-plus hours a week we could spend training, rehearsing technique in a state-of-the-art gym, or climbing outdoors on wonderful sport routes. Unfortunately, most of us can only dream of that. At the most hectic times of my life (when my kids were first born, studying for a PhD, etc.), I prioritized my training time for maximum effect. That meant leaving out many beneficial activities, but it also allowed a crucial balance. I kept up the most-critical training activities such as finger-strength training, and in so doing was able to maintain my level of performance through chaotic

life events that might lead other folks to give up climbing altogether. As these events passed and I had more time, I reinstated many "luxury" training activities and, when combined with the "critical training tasks" I had maintained through the chaotic times, I saw massive improvements. While high-level climbing often involves choosing to skip out on more traditional features of life, such as a career, house, and a family, it doesn't require that choice. There are plenty of examples of folks who "have it all," but it *does* require hard work and careful prioritizing for efficient training.



Time-efficient training makes it possible to improve despite a busy family and professional life. Mike Anderson sent his first 5.14, *God's Own Stone*, with two kids in tow and a PhD in the bag.

never be known. The problem then becomes how to select a training program with so many different options that all seem—at least to some extent—to work.

– Mike Anderson

Any given program is probably better than some and worse than others, with the athlete as the primary variable in determining relative success. Any program should ultimately be tailored to the individual athlete,

but learning how to tailor a training program takes wisdom and experience. Thus it makes sense to start with a basic program that has a broad, proven track record of success. If it's necessary to be a genetic freak or superstar athlete simply to complete a single routine, it's probably not a good choice for most folks. Similarly, if a program depends upon superhuman (or even teenage-human) recovery

abilities to survive the workload, it's probably a worse choice. Many programs from climbing's elite prescribe loads and frequencies that would cripple the rest of us. Other programs rely on the inherent genetic talent or circumstantial advantages of the athlete, so while they work for some they are ineffective for most.



# STRENGTH

**Lock-Off Laps:** A lock-off is a static hang in a contracted position (such as at the apex of a pull-up), and they are a key element of climbing performance. Lock-offs can be trained using individual isometric contractions, or incorporated into an isotonic repetition with predefined "hold points." Using a combination of isotonic and isometric contractions will ensure that the entire range of motion is trained to some degree.

Lock-off laps should be performed on a 45-degree (or so) overhanging climbing wall with many footholds and a ladder of large jugs. Begin in a seated position with feet on small but positive footholds and one hand on the wall (the other hand should hang free). Pull onto the wall, and then raise the upper body until the shoulder of the active hand is adjacent to that same hand. Hold this lock-off position for two deep breaths, then grasp the next jug with the inactive hand. Step the feet up the wall, release the low hand, and then raise the upper body until the other shoulder is adjacent to the other hand. Hold this lock-off position for two deep breaths. Continue in this fashion until the top of the wall is reached (or continuing higher would be unsafe), then work down the board, locking-off each move as on the way up. Continue moving up and down the wall until the desired number of repetitions is reached. This can be an excellent power-endurance exercise when performed with body weight, and also trains functional core strength.

### PUSHING-MUSCLE EXERCISES

**Push-Ups:** Push-ups are a great exercise for maintaining pectoral strength without adding unwanted mass. Push-ups also train deltoid and triceps muscles to a lesser extent, as well as the rectus



abdominis, obliques, and erector spinae core muscles. Begin by lying flat on the floor with the body in a plank position and palms flat on the ground, adjacent to the shoulders. Extend both arms until nearly locked to raise the chest off the ground. After a brief pause, lower the chest to within two inches or so of the ground. A dumbbell can be held between the shoulder blades to add resistance.



Shoulder Press: This exercise trains the deltoids and triceps and helps with so-called "shouldery moves" like extended gastons and overhead underclings. The shoulder press is normally performed with a dumbbell in each hand (though advanced athletes can use body weight to perform "handstand push-ups"). In a standing position, hold a dumbbell in each hand at shoulder level, with your elbows bent. Extend the dumbbells straight up until your elbows are nearly locked, allowing the palms to rotate freely. After a brief hold, lower the dumbbells back to the shoulders. When performed with free weights in a standing position, this exercise also trains core strength.



**Dips:** This exercise trains the triceps, deltoids, pectoral, latissimus dorsi, and rhomboid muscles. These are usually performed on a set of parallel bars, but in a pinch can be performed on the interior corner of a countertop (found in most kitchens). Begin with one hand on each parallel bar, with arms straight and the body suspended in a vertical plank position. Bending at the elbows and shoulder, lower the body until the armpits are level with the hands. Hold this position for one deep breath, and then raise the body back up until the elbows are nearly locked. Use a harness or weight belt to add resistance.

### CORE EXERCISES

Hanging Leg Raises: There are an endless number of potential core exercises, but this one is among the most specific to climbers. These lifts isometrically train the rectus abdominis and obliques, while isotonically training the iliopsoas and other hip flexor muscles. These can be performed with specialized equipment designed to allow the athlete to hang relatively easily from the forearms, or advanced athletes can perform the more difficult version of this exercise from a pull-up bar or free-hanging rings. Beginning with the body suspended in a vertical plank position, raise your straightened legs forward to form a free-hanging pike position (beginners will want to start with knees bent, but should aim to perform this lift with legs straight). Hold this position for one deep breath, then lower the legs back to the free-hanging pike position. Alternate between extending the legs straight forward and 30 degrees or so to either side. Ankle weights can be used to increase resistance as desired.



STRENGTH

Leg Lifts: These train similar muscle groups to hanging leg raises, but target the opposite end of the range of motion. These are much easier (but less sport-specific), so they can be a good variation for beginners. Lie flat on the floor in a reverse plank position. Keeping the legs straight at the knee joint, bend at the hips to raise the feet until they are roughly 16 inches off the floor. Hold this position for two deep breaths, then lower the feet back to the ground. Alternate between raising the legs straight up and 30 degrees or so to either side. Replace this exercise with hanging leg raises as soon as you're able.



### SHOULDER EXERCISES

Lateral-to-Front Raise: These exercises are outstanding for training the deltoid and trapezius, but also train the supraspinatus and serratus anterior muscles of the back. For this reason, those with back problems should perform these only with low resistance. Begin in a standing position with arms hanging straight down, elbows slightly bent, with a dumbbell in each hand. Raise both arms straight out to the side, so that the arms are nearly straight, parallel to the ground, and