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Building Behemoths: Part 2

Bill Starr goes over the finer points of training to lift big loads in strongman competitions.

By Bill Starr

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Mike Warkentin/CrossFit Journal

In [Building Behemoths: Part 1](#), I outlined a number of exercises useful to any athlete training for any type of strongman competition, including those planning on entering any level of Highland games.

In that article, I promised to provide some ideas as to how to improve endurance and flexibility, two attributes that

are often overlooked by the big men seeking to become the world's strongest. In reality, these attributes are just as critical for success in strongman events as they are in every other strength sport.

First, I'll give readers an example of how to program the exercises I recommended. All programs must start with simplicity, regardless of what sport the athlete is participating in. It's just common sense. Build the foundation first and make it solid before moving on to a more demanding program. Three days a week in the weight room are sufficient in the beginning. The other days are for rest and recovery and for practicing the various skills that will be needed in the type of strongman events you plan to enter.

I recommend one primary exercise for each of the three major muscle groups: shoulder girdle, back and hips/legs. Early on, avoid all auxiliary movements for the smaller groups and concentrate all your energy on the primary lifts. There will be plenty of time to hit the smaller groups later on.

Monday (Heavy Day)

Power clean or power snatches fall on Monday. Power cleans are preferred, but in many instances the extra-large athletes have difficulty racking a power clean properly. In those cases, power snatches are the better exercise. There is no need to aggravate your wrists and elbows trying to rack a power clean, and when done with heavy poundage, power snatches are most beneficial, primarily because they require a very long pulling motion, which activates a great many different muscles throughout the back.

For power cleans, do 5 sets of 5. For power snatches, do 2 sets of 5 followed by 3 or 4 sets of 3. Go to max, but be sure you're using perfect technique. Sloppy reps do little to enhance strength and can quickly lead to an injury. It's better to drill with a slightly lighter weight and do the movement correctly than it is to use faulty technique with a heavier poundage.

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Dave Re/CrossFit Journal

Many strongman events require shoulder strength, so Bill Starr recommends steep incline presses instead of bench presses.

For the upper body, do jerks. They are terrific for strongmen because they not only greatly enhance upper-body and overhead strength but also improve the athletic attributes of timing, quickness and coordination, all of which are valuable assets in many strongman events.

Take time to get your form down before adding a lot of weight. Once you feel the fluidity of the movement, you'll know it's time to run the numbers up. When everything clicks on a jerk, it will feel weightless. Do jerks in sets of 3. The bar will always move slightly from the ideal starting position on your frontal deltoids, and when it slips too far, a great deal of stress is placed on your wrists and elbows. It's better to keep the reps lower and add in a few more sets to up your workload.

At the end of every set of jerks, keep pressure up into the bar and hold it there for 5-6 seconds. That little extra effort does wonders for all the muscles and attachments throughout your body, from your traps right down to your feet. It's a very easy way to improve core strength. The idea of core strength has been vastly overworked, yet it's still a factor to consider by anyone wanting to get brutally strong.



The hip extension needed to shoulder a keg can be trained with explosive lifts such as the snatch and clean.

Wednesday (Light Day)

Keep in mind that light does not mean easy—far from it. The light day may be, in fact, the most demanding of the three workouts during the week. “Light” refers to workload. Exercises done on the light day will be, in most cases, performed with less weight than on the other two days.

For the upper body, inclines are my choice for strongmen. Why not bench presses, in which the most weight can be used? Because very few of the strongman events utilize the pecs to any great extent, but many of them involve the shoulders, and inclines work the shoulders much more than flat benches. Also, doing lots of bench presses tends to tighten the shoulders, and this you do not want.

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Alternate your set-and-rep sequence each time you do inclines. One week, 5 sets of 5. Follow that the next week with 3 sets of 5 and 3 sets of triples. The week after, try 3 warm-up sets of 5 and go to limit on doubles or singles. Do a back-off set at the conclusion of each session on the inclines.

If possible, alter the angle at which you do inclines every so often. If the bench you’re using is adjustable, make the slant as steep as possible to force your deltoids and triceps to work in much the same way as if you were doing overhead presses.

For the lower back, you have two choices: good mornings and almost-straight-legged deadlifts. Better yet, alternate the two lower-back exercises every other week. The variety makes them more tolerable, and the two movements work the lumbar muscles and hamstrings in a slightly different manner.

If you just want to do good mornings, change the sets and reps every other week. Do 5 sets of 8 one week and 4 sets of 10 the next. Always use 5 or 10 lb. more on the 8s. The amount of weight you use on the last set of good mornings should be 50 percent of your best back squat. Hence, a 400-lb. squatter will handle 200 for 8 on the good mornings. If you build in this ratio from the very beginning, it’s quite easy to maintain as your squat climbs higher and higher.

For the almost-straight-legged deadlifts, the ratio to the squat is 75 percent. So our 400-lb. squatter will finish his deadlifts with 300 for 8. Again, if this is done from the start, it's not difficult to keep pace as the squat goes up.

You have some choices as to which exercises you want to do on the light day for your hips and legs: lighter back squats, front squats or lunges. If you decide you want to stick with the back squat three times a week, pull back the numbers on the light day—but not too far back. If you're squatting 400 for 5 on your heavy day, use at least 325 for your last set on the light day. And jump to that weight on your third set and do it three times. The load will still be considerably lighter, but those three work sets will keep you from waltzing through the session.

Front squats are terrific, yet they may pose problems for strongmen simply because the bar has to be racked solidly across the front deltoids in order to do them correctly. It's the same problem some big athletes face with the power cleans. However, if you can rack the bar properly and like the feel of the front squats, by all means do them. Three sets of 5 and 3 sets of triples will do the job. If the bar slips

off your shoulders too far, lower the work sets to doubles and add in a few more sets to up your workload.

If I had to recommend one of the three choices, I would pick lunges. The reason I like them so much is that they force both legs to work equally hard. This is not always the case in front or back squats. In those two lifts, athletes often learn how to move through the sticking point by shifting the effort to the stronger side. This cannot be done with lunges. Each leg has to carry its own weight, and over time lunges will bring that weaker leg up to par in terms of strength.

I find it useful to change the sets and reps on lunges at every workout: 4 sets of 8, 5 sets of 5, 6 sets of 3, and go after a max single once a month. The relatively higher reps help to expand the workload, while the lower reps hit the tendons and ligaments to a greater extent. Together, they steadily increase strength in the legs.

Friday (Medium Day)

This workout will consist of overhead presses, back squats and shrugs. Some find that they get more overall work in if they press on Wednesdays and do inclines on Fridays. Either way is fine. The presses should be done for 5 sets of 5 at first, then change the routine to 3 sets of 5 followed by 3 work sets of 3. Over the next months, steadily add in more sets of triples so you end up doing 5 to 6 work sets.

The back squats will be done in a different set-and-rep sequence than on the heavy day. On Friday, do 3 sets of 5 and then 2 sets of 3. Whatever amount of weight you did on Monday for that final set of 5, do 5 or 10 lb. more on Friday for triples. Then, at the next heavy session, use whatever amount of weight you did on Friday for your last set, and do it for 5 reps. In this manner, you will steadily run the numbers up on the back squat—and it's very doable.

On Monday and Friday, add in a back-off set for the squats. Eight or 10 reps is good, but they should be demanding. These sets are great for increasing overall workload. If you decide to do back squats on Wednesday, skip the back-off set.

Dynamic shrugs should be done on Friday, the last training day of the week, because if you attack them as you should, it will take two full days to recover. Shrugs are extremely important to every strength athlete and particularly to those wanting to excel in strongman events. They help strengthen all parts of the upper body and back. They must be done aggressively and with heavy weights. Staying in the comfort zone simply doesn't get the desired results.



Mike Warkentin/CrossFit Journal

Tires are yet another strongman implement that demands a lot of the upper and lower body.

Shrugs can be done inside or outside the power rack, and both clean and snatch grips are beneficial. The key to getting impressive and tremendously powerful traps is to pull every single rep just as high as you can. This means those first few sets with light and moderate weights will travel up over your head. That's exactly what you want because they set the line of pull for all the other sets that follow.

Straps are needed, and your goal should be to handle six 45s on each end of the bar—585 lb.—for 5 reps. Five sets of 5 is sufficient for shrugs, and if you aren't sore the next day, you need to load more weight on the bar. For variety, try shrugging outside the rack. These are considerably harder because you must deal with balancing the bar; they force the lifter to pay closer attention to each and every rep, and that's a good thing.

Quick Lifts

In the last article on this subject, I recommended including snatch- and clean-grip high pulls and deadlifts in the program. How do these fit in? There are a couple of ways.

High pulls can be done right after the power cleans or power snatches on the heavy day. Just do 3 sets of 3.

Or they can be done as a separate exercise on Tuesday. Eventually, you're going to have to add in another training day so the workouts aren't so long. And every other week, you can do deadlifts on Tuesdays instead of high pulls. That's also a good day to do your calf work: 3 sets of 30. This will allow you to fully concentrate on just two exercises, and it will really push your overall workload up.

Give yourself a few months to build a solid foundation on all these exercises, then set your sights on learning the two Olympic lifts. These are, by far, the most useful movements for any strongman to learn. Even if form is not perfect, full snatching and clean and jerking will greatly enhance all the attributes needed to be a better performer in the strongman events.

Work into the Olympic lifts slowly. You're already power snatching, so you have the line of pull down pat. All you have to do is start doing overhead squats after you have completed a power snatch and you're halfway home in learning the lift. Even if you're not able to handle heavy weights, doing snatches will still greatly improve your timing, foot speed, coordination and balance—all of which can be transferred to many of the strongman events.



Loading a stone is a bit like a deadlift followed by a hang clean, so the quick lifts should be part of any strongman program.

Do snatches in sets of 3, and, as always, form comes before the numbers. Everyone misses attempts, but if you start missing more than you make, use less weight. It's the movement itself that's beneficial—more so than how much weight is used.

If you're able to comfortably rack a bar across your frontal deltoids and do a front squat, there's no reason why you can't do full cleans. And you're already jerking. These lifts, like the snatches, greatly enhance athletic attributes that can be utilized in any other strength exercise, such as climbing the power stairs or dealing with Atlas stones.

The E-Word

Now I want to go over the attribute that isn't often addressed in an article about strongman training but plays a critical role in the success of athletes participating in those grueling events: endurance, aka stamina and staying power. The ability to dig deep in the physical and mental reserves is what separates the champions from the also-rans.

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Many strongman competitions are held over a two-day period or stretched out over one very long day. Powerlifters do three tests of strength, and Olympic lifters do only two, so in terms of stamina, strongmen need three or four times more than those other athletes.

Endurance is often equated with some form of "aerobics," a word all big men hate with a passion. Running, riding an exercise bike or working out on a treadmill or a stair machine is completely repugnant to strongmen, but the experts say this what they must do to improve their cardio-respiratory systems. It cannot be done by lifting weights, those authorities contend. I disagree.

I believe any athlete can improve his stamina by lifting weights. The reason the experts think this is not possible is because when they talk about weight training, they're thinking in terms of a basic bodybuilding routine that calls for the athlete to do 3 or 4 sets of 10. In those cases, they're

right: there is little or no improvement in endurance. But handling heavy weights on a wide selection of demanding exercises does affect stamina.

Prof. Gene Logan of Southwestern Missouri State stated in *Adaptations of Muscular Activity*, "Strength undergirds all other factors when one considers the total functioning of the body movements. Without sufficient strength, factors such as endurance, flexibility and skill cannot be used effectively."

Before a toddler can walk, he must have enough strength to support himself. After hip, knee or ankle surgery, the patient must spend time regaining lower-body strength before he can become ambulatory. Walking, running, swimming, rowing and lifting weights are simply extensions of this truism. Getting stronger is the key.

When I was at York, I would often play volleyball or racquetball for a full hour without getting winded, and it was all because of my strength training in the York Gym. And I had witnessed other cases of lifters succeeding while doing some physical exercise that required them to have a great deal of endurance.



Dave Re/CrossFit Journal

While most strongman events are very short, endurance is needed to get through a two-day competition with many tests.

So how can a strongman utilize his strength training to improve his stamina? First and foremost, he must constantly move his workload and intensity higher and higher. Basically, it means the athlete has to handle a greater volume of work every month throughout the year, and the top-end numbers have to go up, as well. I went over how to calculate workload in [Using Workload to Move to the Next Strength Level](#).

And another way to enhance cardio fitness is to constantly work longer each week in the weight room. This must be done slowly or you will fall into the trap of overtraining. This is why it's important to keep close track of your workload. Those numbers will tell you exactly how much more work you're doing each week and month. Without recording all your lifts, sets and reps, you're just guessing, and that can lead to trouble.

At York Barbell, when we were preparing for a contest and knew there would be lots of lifters entering, we got ready for it by expanding our training time to as much as two hours per session. We would also go through some workouts extra fast, just in case we found ourselves having to do two or three lifts in quick succession. Pushing the pace at some sessions, usually the lighter ones, really got us huffing and puffing, but it brought the desired results.

Or we would work extra fast at one particular exercise, such as the power cleans or high-pulls, to raise our pulse rates. I recall one Philly Open where I weighed in at 4 p.m. and did my last clean and jerk at 2 a.m. Without building in the factor of endurance, I would not have been ready to handle the weight I needed in order to medal.

In every sport, there are those who are conditioned for the long haul and come out on top. The lifter or strongman who is able to set personal records at the end of training or in competition is the one who will emerge the winner.

All athletes can improve their stamina simply by taking part in some sports or games they enjoy. Tommy Suggs and I used to spend one lunch hour a week either playing racquetball, volleyball or practicing soccer with the York College team. That little bit of extra effort paid off in the weight room and in the contests.

Train Hard—And Stretch

For overall success, learn how to do all the lifts in your program correctly, then slowly but steadily increase the workload and intensity while expanding the time you spend strength training.



Dave Re/CrossFit Journal

Many strongman events test grip strength, so fat-bar training can help prepare for challenges including a farmers walk.

One other thing strongmen can do to help their cause: Take time every night to do a complete stretching workout. It will do wonders for recovery, and just a tad of flexibility can often mean the difference between finishing an event in first place or last.

Strongmen who take the time to cover all the bases and who work harder than their opponents will come out on top—as will dedicated athletes in every other sport under the sun.

About the Author

*Bill Starr coached at the 1968 Olympics in Mexico City, the 1970 Olympic Weightlifting World Championship in Columbus, Ohio, and the 1975 World Powerlifting Championships in Birmingham, England. He was selected as head coach of the 1969 team that competed in the Tournament of Americas in Mayaguez, Puerto Rico, where the United States won the team title, making him the first active lifter to be head coach of an international Olympic weightlifting team. Starr is the author of the books **The Strongest Shall Survive: Strength Training for Football** and **Defying Gravity**, which can be found at [The Aasgaard Company Bookstore](#).*