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FRICTION BURN

BY MIKE WARKENTIN

Relatively cheap and easily available, sleds are a versatile option for CrossFit gyms.

All: Mike Warkentin/CrossFit Journal

Pulling or pushing a sled is like getting smacked with a baseball bat through a phone book: It hurts like hell but doesn't leave much of a mark.

Long preferred by powerlifters and others for their ability to ramp up workload without creating excessive soreness, sleds might have been considered premium items in the early days of CrossFit, when it was far more difficult to procure equipment. For example, they don't appear in the seminal CrossFit Journal article "The Garage Gym" by CrossFit Founder and CEO Greg Glassman. Even today, with a wide variety of economical push/pull equipment on the market, sleds aren't as essential as barbells, squat racks or pull-up bars.

But they are tremendously functional and very effective. They're also a lot of fun if you're into staggering around the gym trying to figure out why your lungs are burning and your legs stopped working.

SIMMONS SAYS

Sled work got more attention in the CrossFit community after the CrossFIt Journal published "Tough Sledding at Westside," filmed in 2009 and 2010 at Westside Barbell in Ohio. Powerlifters—specialists training for maximum strength—have long used sleds to improve general physical preparedness (GPP), and Westside founder Louie Simmons covered them extensively in the General Physical Preparation chapter of "The Westside Barbell Book of Methods," published in 2007.

Simmons wrote that he learned about dragging after a friend explained many strong Finnish deadlifters were lumberjacks who spent a lot of time pulling heavy objects to tractors sitting on main trails. Similarly, weightlifting legend Vasily Alekseyev, also mentioned in the chapter, grew up moving logs in Russia, according to the documentary "Vasily Alekseyev: The Triumph of Strength."

"Before you can pursue an increase in volume by means of special exercises, you must be in excellent shape. GPP raises your ability to do more work by special means," Simmons wrote.

> Push a very heavy sled for a good distance and you'll feel horrible as you work, but you'll be fine when you bend over to feed the dog the next morning.

As sled pushing and pulling don't have an eccentric component, they don't cause the soreness common to other work. Squat 100 reps at 225 and soreness is almost certain to follow. Push a very heavy sled for a good distance and you'll feel horrible as you work, but you'll be fine when you bend over to feed the dog the next morning.

In the "Tough Sledding" video, Simmons laid out his general principles of sled work when training for strength, power and increased work capacity:

- The heaviest sled work should fall early in the week (max-effort lifts are performed Mondays and Wednesdays at Westside).
- On heavy days early in the week, 8-10 trips of 60 yards are ideal.
- Loads should be reduced throughout the week, with sets increased to 12-15.
- As an example, Simmons said he might program the following loads for sled sessions during a week of training (the type of surface can dramatically affect loading): four plates, three plates, 1.25 plates, one plate.
- Constant changes are recommended—ankle weights and weighted vests can be added for variety.

In "The Westside Book of Methods," Simmons listed 13 types of sled drags, including walking forward, backward and sideways, with variations designed to target both the upper and lower body. The pulling sleds were simply a sheet of metal with a lip and an upright for stacking plates. Many CrossFit gyms have had welders replicate the design, and similar sleds are now commonly available online for less than US$125.

Other implements can also be used: tripod pushing sleds with high uprights on the back and low handles on the front (often referred to as "prowlers"), uprights attached to runners in a dog-sled set-up, wheelbarrows, tires and even flat or incline benches pushed by creative athletes.

The sled can be used as strength work at very heavy loads or conditioning work at lighter loads, either by itself or in combination with other elements. As an example, various push/pull sleds have shown up in the CrossFit Games over the years, sometimes as a monostructural activity and sometimes partnered with other movements.



Old straps from gymnastics rings can be repurposed for sled drags.

SLAYING THE DRAGGIN'

In 2014, owner Brett Kokoruda posted "Prowler Workouts" to the CrossFit Coolidge Corner blog. The short article collected five of his favorite sled workouts.

Kokoruda's athletes skid three sleds—two prowlers and a combination sled/wheelbarrow—across 25 yards of turf in his 5,000-square-foot facility in Brookline, Massachusetts. CrossFit Coolidge Corner is in a developed area that doesn't accommodate outdoor pushing, so he's got room for two lanes of traffic indoors, and he loves using the sleds, particularly when the weather turns on the East Coast.

"When you don't have the running option and the outdoor stuff, it just gives you … something different from the rower," he said. "You can get really reliant on the rowers, and so it gives us a chance to do something different."



Consider friction and load appropriately to get the results you want.



Shared suffering: Larger sleds are perfect for team workouts.

If he had more space and equipment, Kokoruda would use the sleds more often. At present, he generally uses them for team relays in warm-up, as well as for injured athletes or newer athletes who perhaps don't yet have mechanics that will allow intensity with other implements. If a new or deconditioned client isn't ready for power snatches and kettlebells swings, he or she can certainly use a sled to ramp up the intensity.

If a small number of athletes show up for a class, the sleds and the creativity might come out.

"If I have a class where just four people show up, I'll sometimes wipe off what's on the board. I'll say, 'Hey, I've got something better for you,'" Kokoruda said.

He gravitates toward simple workouts that pack a punch.

"The prowler can be so difficult that I found that … I prefer couplets—occasionally a triplet, but usually a couplet."

He added: "I also like building rest into it, so I prefer intervals."

Kokoruda said he will sometimes offer up a brutal slog like 20 body-weight sled pushes for time, but most of the time he targets intensity rather than plodding death marches.

"With the sled, I want to see max effort for as long as I can get it," he explained.

Kokoruda added: "They're one of my favorite conditioning tools."

Strongmanwod.com, hosted by CrossFit Strongman Trainer Course leader Rob Orlando, has a number of workouts in its Sleds category. Like the offerings at CrossFit Coolidge Corner, Orlando's fare generally involves intervals or a small number of movements in addition to pushing and/or pulling.

The strongman expert will sometimes slip a car or truck pull or push into a workout, and his athletes at CrossFit Hybrid Athletics in Stamford, Connecticut, will also grind it out on yokes equipped with skids. He's got one prowler that bolsters a fleet of homemade drag sleds. Orlando said it only takes an hour to feed an eye bolt through the treads of an old tire before mounting a two-by-10 with a vertical stacking post across the sidewalls. He'll feed a strap through the eye bolt, then stack some plates on the post to make the next workout a real drag.

Orlando will often program sleds at the beginning of a workout or use them to create a station in a Fight Gone Bad-style session. He's all about intervals—"Usually on the short side: 90 seconds or less," he said.

He'll drop the intervals to about 60 seconds for strongman athletes and increase their weight dramatically.

Friction created by equipment choice and surface make it impossible to prescribe exact loads for athletes outside his gym, so Orlando said he usually programs duration of effort rather than weight on Strongmanwod.com. He also generally provides a video to show the prescribed speed of the work.

"Depending on what the stimulus is that I'm looking for, I might make it heavy as shit and just say, 'I want this to be 45 seconds of absolute grinding strength work followed by three or four minutes' rest for a couple of rounds.' And that is a completely different stimulus than keeping it on the light side and making people sprint," he said.

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>
> —Rob Orlando



Just add prowlers to turn a playground into a test of character and fitness.

In general, he loads lighter and has athletes work at high speed for max-effort intervals in the range of 45 seconds.

"There are very few things that can make you breath as heavy as pushing a sled at max effort. … You do a 45-, 75-second max-effort sled push or pull and it is absolutely draining. So from a conditioning standpoint, there's very few things that can compete with that."

As a gym owner, Orlando said he looks at return on investment when considering equipment, and he's found a sled's versatility to be well worth the expense—which is minimal if you build your own.

"It's not technical. It doesn't take a huge amount of coaching to get it just right," he said of pushing and pulling. "So we infinitely scale it and make it appropriately difficult from the sedentary to the Games athlete. So from an affiliate owner's perspective, I just think it's hugely valuable and largely overlooked."

Perhaps best of all, pushing and pulling are tremendously functional, a fact immediately obvious to anyone who's pushed a shopping cart through a snowy parking lot or pulled a broken suitcase through an airport. Functional and scalable, sled work is also great for generating power.

"If you look at the sled and how it relates and intersects with CrossFit's original vision—which is (moving) large loads long distances quickly and constant variety—I think it dovetails perfectly," Orlando said.

Disagree? Try this workout, courtesy of Orlando:

Character Builder

5 rounds of:

100-foot sled push (loaded to take about 1 minute)

10 back squats at body weight. ■

ABOUT THE AUTHOR

Mike Warkentin is the Managing Editor of the CrossFit Journal and the founder of CrossFit 204.