

General Physical Preparedness Training

What it is, why you should do it, how it can be done

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The missing link in strength training

Many times athletes will get so caught up in the idea of trying to get stronger and stronger they forget about everything else. They may work out every day, the strongest they've ever been, and think that they're in great shape, but they can't walk across the room without having to stop and catch their breath. This is puzzling to the athlete who has put in so many hours of training to be in "such great shape." The athlete is in great shape though, great shape to hurt themselves. Often times injuries happen because one of the several variables gets way out of whack, things begin to stagnate, and soon after that the athlete gets hurt, and gets hurt badly. This is where General Physical Preparedness training (or GPP) often can help.

General Physical Preparedness training is not a style of training like periodization or the conjugate method; it is a component of training. "GPP training serves several functions: 1) the formation, strengthening or restoration of habits (skills) which play an auxiliary, facilitory role in sports perfecting. 2) As a means of educating abilities, developed insufficiently by the selected type of sport, raising the general work capacity or preserving it. 3) As active rest, assisting the restoration processes after significant, specific loading and counteracting the monotony of the training. These functions define the role of the general-preparatory exercises in the athlete's training system."

(Medvedeyev, 1988)

If a coach becomes too concerned with one aspect of training, the athletes will get out of balance and either get injured or suffer from burn out. GPP helps prevent imbalances and boredom with both specific and non-specific exercises by conditioning

the body to work (Verkoshansky, 1988). The greater the athlete's GPP, the easier it will be for them to adapt to the exercises and demands of a sport (Bompa, 1999).

GPP work can be done many different ways. One of the most common ways in use is the sled (Simmons, Tate). The sled can be drug in many different styles, and several articles have been written on the different variations on the sled, so only the basics will be discussed here.

The sled towing can be done in two different intervals, in measurements of time and distance. When dragging the sled for time, usually you will tow for two minutes in one style, rest 30 seconds, tow for two minutes in a different style, and repeat until your time is achieved (Tate). For example, tow by dragging the sled forwards for two minutes, then turn around and drag the sled while walking backwards for two minutes, then laterally for two minutes. Often times people start out towing for about 14-15 minutes and work up to 20-30 minutes. *The time doesn't increase after you achieve the desired fitness level of dragging a weight for that amount of time, instead of increasing the amount of time, you increase the amount of weight.*

Dragging for distance is done for 200 feet (Simmons), stop, rest (if the exercise will be changed, do so now) then repeat the distance. At the rest point, changing the style of dragging is optional. An athlete can change exercises each rep, as explained earlier, in the same manner as explained in time or do all reps in the same style.

If the dragging is done in place of a max effort exercise on the max effort lower day, the distance is cut down to 100 feet and more weight is used. Every trip, you will add more weight onto the sled until the sled cannot be dragged for the full 100 feet.

For many programs, a sled may not be affordable to purchase. However, they are very simple to build. But you can easily improvise instead of building one. All that is really needed is a place to add weight and a way to pull the sled. You can easily improvise a sled by using an old tire, a long piece of rope, a piece of plywood, and some weights. Lay the tire down flat and tie the rope to it. Next, place the plywood in the bottom of the tire giving it a platform a base for adding weight. Now, simply put weight in the tire, tie a rope around your stomach or wherever you plan on working, and go to work.

GPP can be trained with various implements, very similar to the Strongman events. A vehicle push, tire flip, farmers walk, wheelbarrow push, plate carries, various implement carries, etc.

The vehicle push can be done by gradually building up, and you can save money by using the athletes' or coaches' vehicles. Start out with something small like a little Toyota, and then progress to larger and larger vehicles. If large SUV's or trucks get too easy, just start putting people in them. It's nothing fancy, just hard work.

Another cheap and easy idea is the tire discus throw, this idea was given to me by Russell Traphagan at Parkview High School in Springfield, Missouri. Take an old (or new) tire out to the football field, and simply hurl it like you would a discus. Repeat until you get to the end of the field, work up to about three trips. Another idea from Traphagan is to take a 45-pound plate, place it on a towel on the floor, get on all fours and push it. Keep the distance, reps, and sets the same as towing. If this gets too easy make it more challenging by placing 2-25 pound plates on two towels so there will be more stabilization used to push each plate individually.

The tire flip is done just like on the World's Strongest Man Competition. Simply bend down, pick up a large tractor tire (500 lb minimum) and flip it over. This is a full body exercise. This is one of the few exercises that can actually cost something, if you cannot get it donated by a tire store or an old tire from a farmer. The tires don't wear out very quickly, so it might be tough to get.

The Farmers Walk is a very simple exercise; take a heavy set of dumb bells and just walk with them. Always try to push the athletes to use more weight on this as soon as they can get done what is prescribed. The equipment is there for this if you already own dumb bells, so it is easy to implement into your workout.

If the weight room has Olympic platforms with semi- or completely rubberized plates, simply pick these up on the edges and walk with them to perform a version of a farmers walk called a plate carry.

Wheelbarrow pushes and pulls are another good GPP exercise, and probably free too as many athletes or their parents will have a wheelbarrow in their garage. You can load up the wheelbarrow with either plates or objects and go to town. Not only does this work GPP, but will fry the grip and hamstrings of the athlete as well.

Finally are the various implement carries. Maybe an athlete or coach has an old engine block in their garage, or a huge stone in their back yard, or maybe they have an old oxen yolk in their attic. Be creative with this and use your imagination. The implement lifts should be used to have fun and eliminate boredom during GPP training. One thing to remember though is that you don't want to hurt anyone, so if it has sharp edges or objects sticking out, either round them, get rid of them, or forget about the implement all together. Watch the Strong Man Competitions and maybe it will give you

an idea. Just because they use a \$3,000 anchor to tow doesn't mean you can't use an old engine block on a rope. It doesn't have to be expensive to be fun.

Be creative, and do it for a set time or distance. Maybe it's two minutes, and just try to beat the distance each time. Maybe do it for a set distance and try and beat the time. Maybe do some sort of combination of events like a relay. Just try to keep it interesting, and go no more than two minutes. Going for longer than two minutes will begin tapping into the aerobic energy system. If you want to do aerobics, join a health club or buy a pair of running shoes.

A common way to train GPP is with Javoreks complexes (Javorek, 2000). They are all combinations of Olympic and explosive exercises designed to increase GPP, lactic acid threshold, and induce hypertrophy.

Complex #1	Complex #2
Upright row x6	Upright row x3
Snatch from the thigh x6	Snatch from the thigh x3
Squat & Press x6	Squat & Press x3
Bent Over row x6	Bent over row x3
Snatch from the floor x6	Snatch from the floor x3
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Power complex	Complex #3
Toe raise x20	Upright row x6
1/4 sqt x10	Barbell snatch x6
Squat jump x4	Behind neck press x6
full squat x8	Bent over row x6
Wave squat x24	Squat and press x6
toe raise x20	Seated Press x6
1/4 sqat x10	Good morning x10
Squat jump x4	¼ squat x10
	RDL x10

When training GPP with complexes, do multiple sets (start out with three and work up to six). As with the towing, when you achieve the upper limit on volume (number of sets), increase the intensity (amount of weights).

Currently the current most common way of doing GPP is through bodyweight exercises (Davies, 2001). Exercises such as squats, mountain climbers, jumping jacks, jumping rope, different jumps, pushups, sit ups, and just about anything that can be thought of can be done. They are set up in one of two fashions. Either they are performed for a set time or a set number of reps and sets. Again, this is another free or dirt-cheap way to work on GPP.

When an exercise is performed for a set time, the repetitions are done non-stop until the time is completed. There is also a set rest interval. For instance, a good starting point is 30 seconds on, 60 seconds off. Start with three sets of four exercises. To increase the workload, one of three things can be done: increase the number of sets, decrease the rest time, or increase the work time. You eventually want to build up to ten

minutes of work time. The beauty of this style of training is that it leaves you the freedom to be able to be creative. Let your mind go and come up with something fun.

In conclusion, General Physical Preparedness will be what more and more athletes and coaches turn to for the edge on their competition in the near future. By using implements, weights, and simple bodyweight, a athlete can teach their body to go for long times through strenuous exercise at a moments notice. Teams such as the Green Bay Packers in the NFL have already begun to do it and have gotten excellent results by being able to out-play the other team in the fourth quarter.

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