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Everyman's Gymnastics

The Seminar

Roger Harrell

On Aug 14, 2005, about twenty participants and several observers descended on the Novato Gymnastics Center in Novato, California, for a CrossFit gymnastics seminar. The group was widely mixed, with ages ranging from under twenty to mid-fifties and with backgrounds that included Olympic skiers, Navy SEALS, non-competitive athletes, and folks at various stages of their CrossFit journey, from longtime veterans to beginners. Body weights and sizes ranged dramatically as well. The attending group embodied the axiom that CrossFit is for everyone—and, in the course of the seminar, they demonstrated that gymnastics can be too.

At the seminar we—men and women, large and small, kids and adults—worked on floor, pommel horse, parallel bars, vault, beam, rings, and high/uneven bars. The focus of the seminar was to learn proper progressions and teaching techniques for the foundational gymnastics movements and skills so important to CrossFit's programming and effectiveness. Learning these fundamental skills properly from the beginning will facilitate safe and incremental progress to more advanced gymnastics skills.

Early in the seminar, everyone spent some time learning to fall properly. Gymnastics is considered a sport with high risk, but learning proper falling techniques reduces the risk dramatically. In fact, in most gymnastics programs, injury rates are lower than in many supposedly "safer" sports. This is due to proper progressions and learning how to fall—skills that are enormously beneficial outside the gym as well.

The eagerness with which the CrossFit crew approached every challenge was inspiring. When I announced that we would be practicing cartwheels, the group cheered. After doing drills for just a few minutes, everyone in the group was able to perform cartwheels in both directions, and, after a few technique corrections, many had clean extended cartwheels as well.

Participants also showed excellent preparedness in support skills. We covered all types of swings on parallel bars and pommel horse, and the base strength level of the participants was remarkable. A strong and technically correct swing to handstand on parallel bars is obtainable by everyone who attended the seminar with continued practice and observance of technique. Several folks also came close to swinging past one double leg circle on the mushroom, which generally takes new gymnasts a long time to develop.

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Another striking example of the effectiveness of laying sport-specific technique on top of a strong GPP foundation was seen in practicing sprinting for vault. Many saw significant increases in sprint speed within a few minutes of practicing techniques, and one individual (who was already fast by most standards) saw a 20-30 percent increase in his sprint with less than fifteen minutes of practice.

Beam practice was focused on proper balance checks and stability. And, yes, we put 200-pound men on beam. One soldier showed incredible stability, and I received many comments about this from the other gymnastics coaches who were present. This again shows that elite foundational fitness can be applied to any specific situation that arises, whether in the artificial gym environment, on the street, or in the field.

One achievement particularly of note was the glide kip. This is a skill that is largely technique and while strength certainly helps, the skill cannot be accomplished purely by "muscling" it. A glide kip generally takes people a few weeks to learn. In my years of coaching I have seen individuals learn it in one practice session, but that is uncommon. At the CrossFit seminar, several people learned a glide kip within minutes of their first attempt, including one who weighs approximately 250 pounds, and many others were close and will learn it with just a little more practice. This achievement testifies that CrossFit is not simply a "dumb" strength and conditioning program but develops kinesthetic awareness and agility.

Further training in gymnastics and a wide variety of skills and movements will only compound these benefits.

The progress made by these individuals in a single day was impressive. I have coached an enormous variety of individuals in the sport, including many high-level collegiate athletes and a few professionals. Virtually all have had severe limitations in one area or another. This was not the case with the CrossFit group. Participants were well prepared on a broad base of movements and strength. The GPP effectiveness of CrossFit was strikingly clear.

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The entire day proved extremely successful and showed tremendous promise. I am truly excited to see the results that the continued adoption of gymnastics training into CrossFit will yield. The CrossFit community is already well primed to learn and refine gymnastics skills and movements. The stimulus that gymnastics provides, on top of and as part of the GPP foundation of CrossFit, is incredible. The combination of disciplines that is CrossFit is yielding individuals that are prepared for anything. Moreover, the achievements of this varied group demonstrate clearly that gymnastics is not just for the small and the young.

For more details on the specific skills and techniques see http://www.drillsandskills.com.

CrossFit Gymnastics Seminar I Handout

Falling:

If you are falling forward fast and hard, rolling is the best option. If you are falling at all sideways a shoulder roll is the best option. If the fall is completely square a square forward roll may be the best option. In either case a preparatory step will help control and slow the motion.

When falling backwards in NO case should you ever reach back with your fingertips facing backwards. This should be practiced and drilled so the natural reaction to reach back is overridden. As you fall back your arms belong just by your side (so your hands are placed on other side of your rear fingers forward and palms down. An alternative position for the hands is above your head. This is generally a better option on a surface with some give. In either case as soon as contact with the ground is made hands should transition to over your head to take impact away from your head, and in some cases prepare to complete a backwards roll.

Floor:

Forward roll:
Start position: With knees together squat on the balls of your feet. Place your hands flat on the floor with spread hands. While maintaining pressure on your hands tuck head and place the back of your head between your hands while pushing with your legs to roll over. Maintain a rounded back by contracting your abs and keep looking at your knees. As you roll forward try to maintain momentum to roll up onto your feet and standup without pushing off the floor with your hands. Your arms should just reach forward at the end of the roll.

Common mistakes:
Not enough pressure on the hands.
Allowing body to be loose and flopping onto the floor.

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Possible assists:
Forward roll down an incline mat for gravity assist.
A partner can help spot the skill by placing one hand on either hip of the student and lifting while pushing forward. Be sure to assist sufficiently so there is little load on the head or neck.

Drills:
Start in a stand, squat down, roll into a tucked candlestick position, roll back up to standing without using your hands.

Backwards roll:
Start position: standing with "pizza hands" stand as if you were carrying two pizzas, one balanced on each hand with flat palms, elbows straight forward. Sit and lift your feet to roll onto your back. As you rock onto your shoulders "squash the pizzas" by placing your palms on the floor next to your ears and pushing. Keep driving your toes over your head in the direction you are rolling. Push as you roll over and stand up.

Common mistakes:
Throwing head and shoulders back to drive the roll. The roll should be driven by lifting feet/legs.
Not enough push with the hands. This will make the roll uncomfortable as it will allow a lot of weight to be placed on the head.

Possible assists:
Backwards roll down an incline mat for gravity assist.
As the roll progresses follow the student and place one hand just above each hip to liftand push the student over in the roll.

Other Rolls:
Straddle FW/BW, Pike FW/BW, Handstand FR. Back Extension. Stalder roll, dive roll. Shoulder rolls FW/BW L/R.

Cartwheels:
Start position for right side cartwheel: lunge with right leg forward and bent, left leg back (these two foot placements define the cartwheel line). Reach forward with your right hand and place it on the cartwheel line while kicking your left leg. Reach over to place your left hand on the cartwheel line while your right leg pushes off the floor. Your left leg will now come down on the cartwheel line toe first while your right hand pushes off the floor. Finally your left hand pushes off the floor as your right leg comes down.

Progression:
Start standing straddled with your hands placed palms-down on a 6"-12"-high 18"-wide object. Jump back and forth from your left to right leg while maintaining support on your hands. As your comfort level increases kick higher and higher until this develops towards a cartwheel over the object. From this point cartwheels can be done over the object (again for right side cartwheel). Place your right foot next to the object. Reach forward and place your right hand on the near side of the object while kicking your left leg. Reach over and place your left hand on far side of the object while pushing off the floor with your right leg. Your

left leg will come down on the far side of the object while your right hand pushes off. Your right leg will come down while your left hand pushes off.

Common mistakes:
Bringing lead heel down as cartwheel completes. This will cause the student to turn outward and end up out of position. The toes should lead.
Turning hands out on the floor. Fingertips should be turned inward.

Handstand:
Start in a lunge with hands on a panel mat. Kick off the floor and get weight on your hands. As you get more comfortable with hand support do the same thing on the floor. As your comfort level increases kick higher into the handstand. As you approach the handstand ensure that you are comfortable rolling out of the handstand.

Common mistakes:
Piking at the shoulders. Shoulders should be kept completely open. A straight line drawn from feet to hands should remain in contact with the skeleton.
Keeping head out. Head should be kept neutral. Hands can be seen, but only by looking with the eyes, not by lifting the head.
Arching. A handstand should be hollow. A good test of handstand position is to see if the student can look at their toes while in the handstand. If they are arched, this is not possible.

Press Handstand:
The easiest press handstand is a standing straddle press to handstand. As discussed will be for a straight arm press. While a bent arm press is easier it is mechanically quite different and not necessarily progressive to a straight arm press. The key to a press handstand is lifting your hips first. Resist the temptation to rush your legs to the handstand. Push into the floor, open your shoulders, and straddle as wide as you can. Lift your hips, then extend your hips to the handstand. Practice the motion of the press by doing press to headstand. Start in a tripod position with your hips high and toes on the floor. Keeping your torso vertical lift your legs to headstand, and lower controlled to the floor. Repeat this motion. Next move to doing a straight arm press to handstand against a wall. Stand in a straddle with your fingers 4"-6" away from the wall. Lean forward until your shoulders contact the wall, and press to handstand. Lower controlled back to straddle stand. Next start working the press free standing. A drill to force proper technique is to start the press in a straddle stand with your butt against the wall. This will prevent you from planching the press. You must lift your hips and bring your legs out to the side to complete the press from this starting position.

Common mistakes:
Lifting the legs too soon and planching the press. This greatly increases the difficulty of the press.
Bending the arms. Practicing a bent arm press will develop a consistent bent arm press.

Possible assists:
Stand in front of the student: as they press up spot their hips. Your knees can be used to prevent their shoulder angle from breaking.
An alternate to the above is to reach over and grab the students inner knee. With

this spot you can assist with the compression of the press and ensure proper technique.

Parallel Bars:

Support swing: Support with inside of your elbows facing forwards. The line between your shoulders and toes should be kept completely straight initially.

Common mistakes:
Piking at the hips in the front swing. As the swing rises in front the body should be kept straight and the hips will rise in the front, not just the toes.
Arching in the back swing. A hollow position should be maintained in the back swing. This enables a more powerful swing and will stabilize the handstand.

Upper arm swings:
This will be uncomfortable at first. Be sure to push down hard and keep your shoulders as high as possible.

Common mistakes:
Bending the elbows too much. Elbows should be bent at about 90 degrees. This allows for a more dynamic swing and enables better function.

Basket swing:
Start in a "basket" position. Hang below the bars in an inverted pike so that your legs are parallel with the ground. Initiate the swing with your shoulders. Shuttle your arms forwards and backwards to generate swing. As this swing develops you can begin to pump the swing by opening and compressing the swing. Compress at each peak in the swing, open at the bottom of each swing. Keep looking at your knees throughout the swing.

Common mistakes:
Bending the arms will kill the swing.
Not maintaining compression. Center of gravity should be kept as far from the bars as possible to maximize angular momentum.

Long hang swings:
This swing is essentially a bent-kneed version of the tap swing on high bar.

Shoulder stand:
This skill should be learned first on P bar blocks, stacked panel mats or similar. Set the mats/blocks so that there are two parallel surfaces the same width as the parallel bars. Start kneeling on the blocks. Lean forward and place your shoulders on the mats/blocks so that your hands are back by your calves and palms are facing upwards. Lift your hips into a tucked shoulder stand using your arms to stabilize. When stable lift your legs to a shoulder stand.

Progression to P-bars:
Once a shoulder stand is learned on the blocks/mats it can be transitioned to the P-bars. Start in a support with your shins resting on the bar just behind your hands (your knees should be touching the heels of your hands). Lean forward and place your shoulders on the bar. The critical piece here is to stick your elbows out to the side. Allowing your elbows to fall in to your sides will allow the shoulder stand to

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fall between the bars. From this position, lifting the hips into a tucked shoulder stand and then the legs into an extended shoulder stand can be accomplished just as it was on the blocks/mats.

Common mistakes:
Dropping the elbows to the side. This is extremely common and the lifting of the elbows will need to be constantly reinforced.

Possible assists:
Stand next to the bars so that the bars are at hip height and assist by supporting the students torso or legs.

Pommel Horse:

Front support straddle swings:
Hold a support so that your legs are behind your hands. Straddle and swing side to side.
The key here is to kick the low leg as soon as the previous swing has peaked. Do not let your legs come together at the bottom. Drive your leg aggressively upwards. As the swing develops you will want to shift your weight from side to side opposite your legs.

Common mistakes:
Lifting the hips as the swing rises. The swing is accomplished kicking the leg to the side.

Rear support straddle swings:
Hold a support so that your legs are in front of your hands. Push your hips and chest forward and arch a little so your heels are under the pommel horse. Straddle and swing. This swing is pretty awkward to begin with. Do a lot, you'll get used to it.

Stride swings:
Start in a stride support with one leg forward, one leg back. Push your hips forward so that your hips are centered between the pommels. Initiate the swing by kicking your back leg out. Drive your back leg as high as possible. As the swing returns through the bottom allow your hips to open as the swing progresses. As your swing gets bigger you will find that you have to release the pommels to get any higher. Shift your weight from side to side opposite your legs as you swing and this will become natural.

Common mistakes:
Using the front leg to swing. Focus entirely on driving the back leg for the swing.
Bending the front leg. Keep your hips forward, and squeeze your front leg straight.

Possible assists:
Stand behind the pommel horse and provide a target to kick on the power side of the swing. Hold up a hand at the students shoulder height for them to kick.

Scissor drills:
From a stride swing with the right leg in the rear, perform 2-3 stride swings. As your right leg kicks high in the back on the right side, release your right hand and place your left leg on the end of the pommel horse. You should now be in a straddled side support, supported on your left hand and left leg.

Common mistakes:
Trying to lift the front leg too soon. The swing still needs to drive with the rear leg, and the

hand is not released and the drill attempted until the swing has almost peaked.

Leg cuts:
From a front support swing, bring one leg forward, other leg forward, first leg back, second leg back. This should be done while maintaining swing and rhythm. This should be practiced both directions which entails initiating the sequence with the right and left legs individually.

Rings:

Basic swings:
Developing a good swing on rings takes time. It is a double pendulum swing and is more difficult to learn properly than other swings. You must initiate the swing with your legs but support the swing through your shoulders. Maintaining pressure on the cables throughout is essential.

Proper supports:
A proper ring support is with the rings turned out. The palm of your hand should be rotated forward about 45 degrees. Initially this will make the support more difficult, but will enable better support and more functionality in the long run.

Common mistakes:
Bending the arms. Strive to keep straight arms continually.
Allowing the rings to go out to the side. It is important to keep your elbows pinned against the side of your body, unless you are intentionally doing an iron cross.
Hunching the shoulders forward. Keep your head up, hips neutral and chest lifted.
Turning the rings out (i.e. palms toward the front) will help.

Shoulder stands:
Start in an L and lift as you press to shoulder stand. Lift your hips and get your hips all the way to vertical before lifting your legs. You can straddle as you approach the top to catch the cables for assistance.
Learn how to roll forward out of a shoulder stand. Just tuck your head roll forward and hang on. It may be a little disconcerting at first, but it's quite simple. This needs to be a comfortable motion before handstands are attempted.
Learn how to push back to a stable support from the shoulder stand. Reverse the motion. Start by bringing your legs down, then push up to support.

Common mistakes:
Trying to lift the legs too soon. Many people want to get their feet up quickly. Focus on lifting the hips completely before lifting the legs at all.

High bar/Uneven bars:

Pull over:
Hang on the bar. Initiate a pull up, then lift your legs backwards over the bar while continuing to pull. Pull the bar toward the lower part of your chest as your body lifts over the bar. Roll up to support.

Common mistakes:
Throwing the head back, and straightening out the arms. The pull must be maintained throughout, head should be in looking at the bar.

Possible assists:
Stand so that you are on the opposite side of the bar as the student. As they lift their legs you can assist their legs over the bar with the hand that is farther away from them, then assist their torso with the closer hand by pushing on their lower back.

Glide:
Start with your hands on the bar, head in, shoulders completely open. Jump up and backwards. Be sure to keep your shoulders completely open. As you swing forward lift your toes so they just barely miss the mat/floor. Swing back to a stand.

Common mistakes:
Closing the shoulder angle. This will cause a drop in the glide at the bottom and greatly reduce the swing.

Glide kip:
Glide forward. Just after the glide starts to swing back bring your toes to the bar. Do this by piking at the hips, not by closing your shoulder angle. After your feet come to the bar, kip and push down on the bar to arrive in a support. Timing on this skill is essential.

Common mistakes:
Bringing the legs to the bar by closing the shoulder angle. This reduces the amount of push you will be able to use on the second phase of the kip. It is effective to do this out of a very large swing, but is not advised for a glide kip
Kipping too early. Most people will tend to kip early. If everything else is done properly, then an early kip will result in the support being short of vertical and not impossible to maintain.
Pulling on the bar. Many people will want to pull on the bar to get on top of it. A kip is a pushing skill. There is no pull involved.

Possible assists:
Stand next to the bar opposite the student. As they glide place your far hand under their calves and your near hand under their lower back. Then you can assist with the leg lift, and with the kip. Once you understand the feel of the spot you can assist with the timing of the skill.

Cast:
Hold a support. Kick both legs back and up and push. A hollow body should be maintained.

Common mistakes:
Arching the cast. It is very common to arch as the heels are driven upwards. This should be discouraged. A hollow cast is more functional.

Tap swing:
The swing should be hollow in the back with shoulders open and toes pointing back and down. This hollow should be maintained until near vertical then the hips should open through the bottom, and feet should be kicked towards the ceiling in the front. After the kick the bar should be pressed back to keep the whole body lifting through the swing.

Common mistakes:
Arching in the back swing. It is critical to maintain the hollow in the back swing.

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Allowing the feet to fly back into an arch will dramatically reduce the swing.
Not pushing back in the front swing. The bar must be pushed back in the front swing. Otherwise a lot of potential energy is lost and the swing will not be as high.

Beam:

Walking:
Keep your head and chest up. Do not look down at the beam. Feel the beam with your feet.

Balance checks:

Natural reactions to losing your balance include throwing your hips forward, extending and flailing your arms. This is not optimal. The first thing to do when catching your balance is to lower your center of gravity. This means bending your knees and dropping your hips. Squat a little as you catch your balance. This makes catching the balance much easier, and enables you to grab on if you still happen to fall.

Stretching:

Stretching should be a major component of any fitness program. It is minimized far too often. There are no magical secrets to stretching. The main technique is to stretch often. The more often you stretch, the easier it will be to gain flexibility. There are a few points to consider when stretching.

Static stretching:
Static stretching is sitting and holding various positions in which muscles are under tension. You want to learn how to relax the muscle being stretched to maximize effectiveness. For example in a pike stretch learn to relax your hamstrings, lower back and upper calves while stretching. Having a partner to help push you into positions can help in this arena, but it is possible when solo stretching. Holding positions for minutes is not necessary. Fifteen to twenty seconds per position, cycling through positions several times is more effective. Static stretching after a workout is more effective than prior to a workout.

Dynamic stretching:
Dynamic stretching is performing movements that approach the limits of your flexibility dynamically. Care must be take when doing this as muscle pulls and other injuries can occur. Be sure to be properly warm up before doing any dynamic stretching. Be aware of your limits and approach these movements gradually. Properly undertaken dynamic stretching can increase flexibility rapidly.

Roger Harrell is a former competitive gymnast with twenty years of experience in the sport. He has continued to train in the sport well beyond his competitive years. He has run several competitive gymnastics training programs and currently focuses on coaching adults and bringing the benefits of gymnastics to those outside the usual community. He is the developer, designer, and webmaster of www.DrillsAndSkills.com.

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