

RUGBY FITNESS TRAINING

By

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Over the last few years I have been asked frequently about the availability of information on Rugby Fitness Training. In general, there is no readily available information about how to train for our sport. As an initial attempt to rectify this I have cobbled together this program. I have used it myself, have given it to several of the teams that I coach, and have found it to be a pretty good system. Before you get too deep into it, however, I need to provide a couple of caveats.

I am not a fitness guru nor a trained fitness instructor-I am a user of fitness information. There is no doubt in my mind that this system can (and should) be improved upon by professionals in this field. What I am providing in this system is one that I have found to be useful. I can tell you for a fact that it works to increase the overall fitness level of Rugby players. I will leave it to those who do this sort of stuff for a living to find (and correct) any deficiencies.

The sources of this information are several. The weight training stuff was inspired by a book written many years ago about the Penn State Football Strength Training Program. It provides a template for effective, efficient, and rapid strength gain. The Interval Program is stolen (unabashedly) from some stuff handed-out by former ERU, MARFU, and USARFU Coach Clarence Culpepper many years ago. The Plyometrics information was gleaned from many sources in this relatively new field and, frankly, one that is poorly understood by Rugby coaches in general.

If you already have a fitness program for your players or yourself, good. I offer this program as a comparison to what at least one other Rugby coach is doing. If you do not have such a program in place, I am providing this as a place to start. I encourage each coach and player to review it critically and to modify it to meet your needs.

Cheers



EXAMPLE RUGBY FITNESS TRAINING PROGRAM

CLUB TRAINING SCHEDULE

Offseason From the end of previous season to eight weeks before the first Club Practice of the next season.

Monday Weight Training and Plyometrics
Tuesday Interval Training or other activity
Wednesday Weight Training and Plyometrics
Thursday Light and Easy Interval Training
Friday Off
Saturday Any Sports Activity or Fartlekking
Sunday Long Slow Distance

Preseason - Eight weeks before the first Club Practice of the next season to the first Club Practice.

Monday Weight Training and Plyometrics
Tuesday Interval Training or Sprint Training
Wednesday Weight Training and Plyometrics
Thursday Interval Training or Sprint Training
Friday Off
Saturday Fartlekking
Sunday Long Slow Distance

In-season - From the first Club Practice through the end of the season.

Monday Weight Training and Plyometrics
Tuesday Club Practice
Wednesday Interval Training
Thursday Club Practice
Friday Off
Saturday Club Match or Fartlekking
Sunday Long Slow Distance



NOTES ON TRAINING

1 WEIGHT TRAINING

At a minimum, the following exercises should be performed. The emphasis is on upper body strength since all of the running involved will work the lower body a lot. Still, some strength and flexibility training of the lower body should be included.

- 1.1 Military Presses From a sitting position pushing weight directly over your head.
- 1.2 Deltoid Lifts From a sitting position lifting weight outward and to the side.
- 1.3 Biceps Curls From a sitting position lifting weight by bending your arms.
- 1.4 Triceps Extensions From a sitting position lifting weight by extending your arms.
- 1.5 Pull Downs From a sitting position pulling weight downward and behind your neck.
- 1.6 Butterflies From lying on your back with your arms either fully extended or bent at the elbow lifting weight from your sides without bending your arms (i.e.-not using you biceps to lift the weight).
- 1.7 Leg Curls Like Biceps Curls except using your legs while lying on your stomach.
- 1.8 Leg Extensions Like Triceps Extensions except using your legs while sitting.
- 1.9 Anything Else (that Suits Your Fancy) - Hand and wrist strengthening exercises, neck work for front row players, sit-ups, stomach crunches, or whatever.



Choose a weight with which you can perform at least 8 reps and no more than 12. If you cannot do 8, go on to the next exercise and remember to pick a lower weight next time. If you can lift more than 12, move on and next time pick a higher weight.

All lifts are done to a count of TWO TO LIFT, a count of FOUR TO LOWER. The goal is to reach "momentary muscular failure," that is that you cannot lift any more weight without resting. Move immediately to the next exercise.

YOU NEED ONLY TO PERFORM ONE SET PER TRAINING PERIOD.

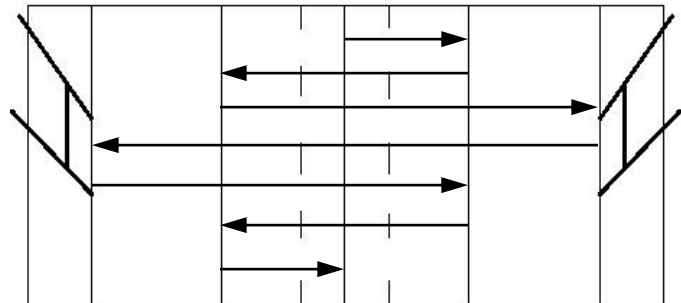
As a general rule, the Offseason is the only time you will see significant strength gains. In the Preseason and In-season periods there are too many other activities going on and too many nagging little injuries for you to concentrate on strength. Encourage your players to continue weight training in the Offseason and you will see a stronger, fitter team come next season.

2 INTERVAL TRAINING

A simple interval training exercise set is as follows:

- One 25
- One 50
- One 75
- One 100
- One 75
- One 50
- One 25

Total for one set = 400 yards.



Between runs walk back to the starting line and run the next sprint. The 25's and 50's are run at full pace, the 75's and 100's at 80% or so. The best way to run them is to find a football, soccer, or Rugby pitch. For a Rugby pitch, begin at the midline and sprint to one 22, turn around and sprint to the far 22, turn around and run (80%) to the goal line, turn around and run (80%) to the other goal line, turn around and run (80%) to the far 22, turn around and sprint to the other 22, turn around and sprint to the midline. That's one set.

You will do better if you can run these with a partner. Your brain will tell you that you are tired long before you need to stop. Running with a partner will probably keep you going through the exercise.

In the Offseason and early Preseason you should shoot for four (1,600 yards) to six (2,400 yards) sets. In the later Preseason and during the In-season period you should be looking at five (2,000 yards) to eight (3,200 yards) sets. Remember, one mile is 1,760 yards.

The purpose behind Interval Training is to stress your body and to decrease the recovery time you need to take. In the Offseason, allow a work to rest ratio of one-to-four. In the late Preseason and the In-season the work to rest ratio should be around one-to-three or one-to-two (very businesslike).

I have also attached a nine week Interval Training Program (below) that details an alternative and more structured approach.



3 INTERVAL PROGRAM

This Interval Training Program is a two night per week, nine week course designed to develop acceleration, speed, and endurance. All Intervals are run at either FULL SPEED (flat out) or at FAST SPEED (75% to 85% of maximum effort) with a brisk walk and/or jog back to the start. Alternate starting foot with each run.

The Program is quite demanding and NO SUBSTITUTE ACTIVITIES ARE ACCEPTABLE!

WEEK ONE (yards/miles)

Tuesday	2 x 440 yards (FAST)		Thursday	4 x 330 yards (FAST)	
	4 x 220 yards (FAST)	(1,760/1.00)		2 x 110 yards (FAST)	
				2 x 110 yards (FULL)	(1,760/1.00)

WEEK TWO

Tuesday	3 x 440 yards (FAST)		Thursday	2 x 330 yards (FAST)	
	3 x 220 yards (FAST)	(1,980/1.13)		2 x 220 yards (FAST)	
				2 x 110 yards (FAST)	
				2 x 110 yards (FULL)	(1,540/0.88)

WEEK THREE

Tuesday	4 x 440 yards (FAST)		Thursday	1 x 440 yards (FAST)	
	5 x 85 yards (FULL)	(2,185/1.24)		2 x 220 yards (FAST)	
				5 x 110 yards (FAST)	
				4 x 85 yards (FULL)	(1,770/1.01)

WEEK FOUR

Tuesday	4 x 85 yards (FAST)		Thursday	2 x 220 yards (FAST)	
	4 x 110 yards (FAST)			4 x 110 yards (FAST)	
	1 x 220 yards (FAST)			5 x 85 yards (FULL)	(1,305/0.74)
	8 x 55 yards (FULL)				
	1 x 220 yards (FAST)				
	4 x 110 yards (FAST)				
	4 x 85 yards (FULL)	(2,440/1.39)			

WEEK FIVE

Tuesday	11 x 25 yards (FULL)		Thursday	2 x 220 yards (FAST)	
	7 x 85 yards (FAST)			6 x 110 yards (FAST)	
	3 x 110 yards (FAST)			9 x 25 yards (FULL)	(1,325/0.75)
	3 x 220 yards (FAST)				
	3 x 110 yards (FAST)				
	2 x 85 yards (FAST)				
	11 x 25 yards (FULL)	(2,635/1.50)			

WEEK SIX

Tuesday	4 x 220 yards (FAST)		Thursday	2 x 440 yards (FAST)	
	3 x 110 yards (FAST)			2 x 220 yards (FAST)	
	3 x 110 yards (FULL)			6 x 110 yards (FULL)	(1,980/1.13)
	5 x 85 yards (FAST)				
	5 x 85 yards (FULL)				
	1 x 440 yards (FAST)	(2,830/1.61)			

WEEK SEVEN

Tuesday	2 x 330 yards (FAST)		Thursday	1 x 330 yards (FAST)	
	12 x 55 yards (FULL)			10 x 85 yards (FULL)	
	1 x 330 yards (FAST)			9 x 25 yards (FULL)	
	10 x 85 yards (FULL)			10 x 55 yards (FULL)	
	1 x 330 yards (FAST)			9 x 25 yards (FULL)	(2,180/1.24)
	10 x 25 yards (FULL)	(3,080/1.75)			

WEEK EIGHT

Tuesday	10 x 110 yards (FAST)		Thursday	19 x 25 yards (FULL)	
	10 x 85 yards (FULL)			15 x 55 yards (FULL)	
	10 x 55 yards (FULL)			10 x 110 yards (FULL)	(2,400/1.36)
	26 x 25 yards (FULL)	(3,150/1.79)			

WEEK NINE

Tuesday	15 x 25 yards (FULL)		Thursday	3 x 220 yards (FAST)	
	10 x 55 yards (FULL)			2 x 110 yards (FULL)	
	5 x 85 yards (FULL)			10 x 85 yards (FULL)	
	3 x 110 yards (FAST)			10 x 55 yards (FULL)	
	2 x 220 yards (FAST)			14 x 25 yards (FULL)	(2,630/1.49)
	3 x 110 yards (FULL)				
	5 x 85 yards (FULL)				
	10 x 55 yards (FULL)				
	15 x 25 yards (FULL)	(3,800/2.16)			

4 SPRINT TRAINING

There is no-one sprint routine that is perfect for all athletes, let alone for Rugby players of different positions. However, from my experience the following routine has given me as a player and as a coach the most benefit. It's important that not only the body is warmed-up, so too is the mind. Rugby and sprinting is an attitude of mind and it's those that are "switched on" will find the most success.

4.1 Warm-up

Each athlete has their own particular warm-up session that best works for them, nevertheless knowing that this Sprint Training Session will take an hour and a half (90 minutes), try the following.

4.2 Two laps of running track of two laps of a full Rugby pitch, running along each “dead-ball” line. This should be run at a good striding pace, around 65% of maximum effort.

4.3 Stretching.

The mistake often made with the Stretching exercises is for athletes to “bounce” when stretching. By the definition of the word, the muscles groups need to be stretched in a continual motion to the individual’s limits, then relax.

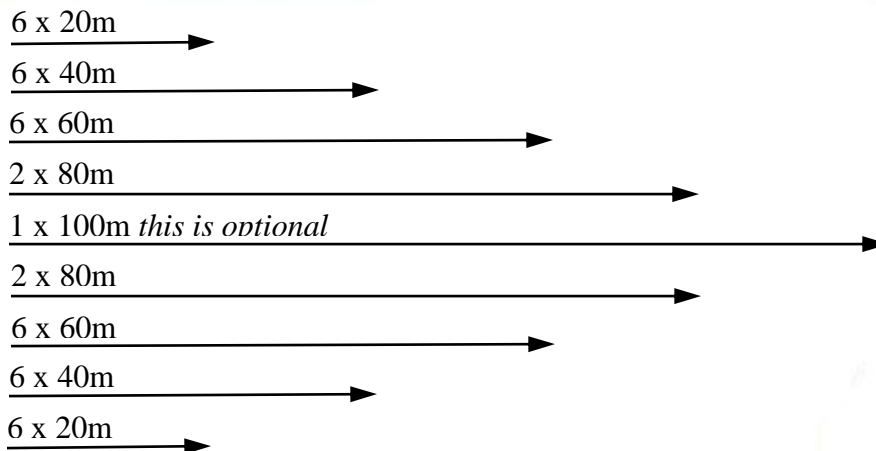
Work from the ankles, then calves, hamstring, quads, hips, finishing with shoulders. This should take a good ten minutes or more.

4.4 The Pyramid

This is designed to minimize the recovery period to simulate what will happen during a game, and can be performed by using the standing start or “sprint” start position. To develop the power of sprinting and acceleration, I have preferred the “sprint” start position.



Using the running track as the training facility, start on the 100 meter base line, in a center lane, when the sprint has been performed at 100%, flat out pace, past the designated mark, jog back to the start position, never walking. Remember to keep relaxed in the sprint

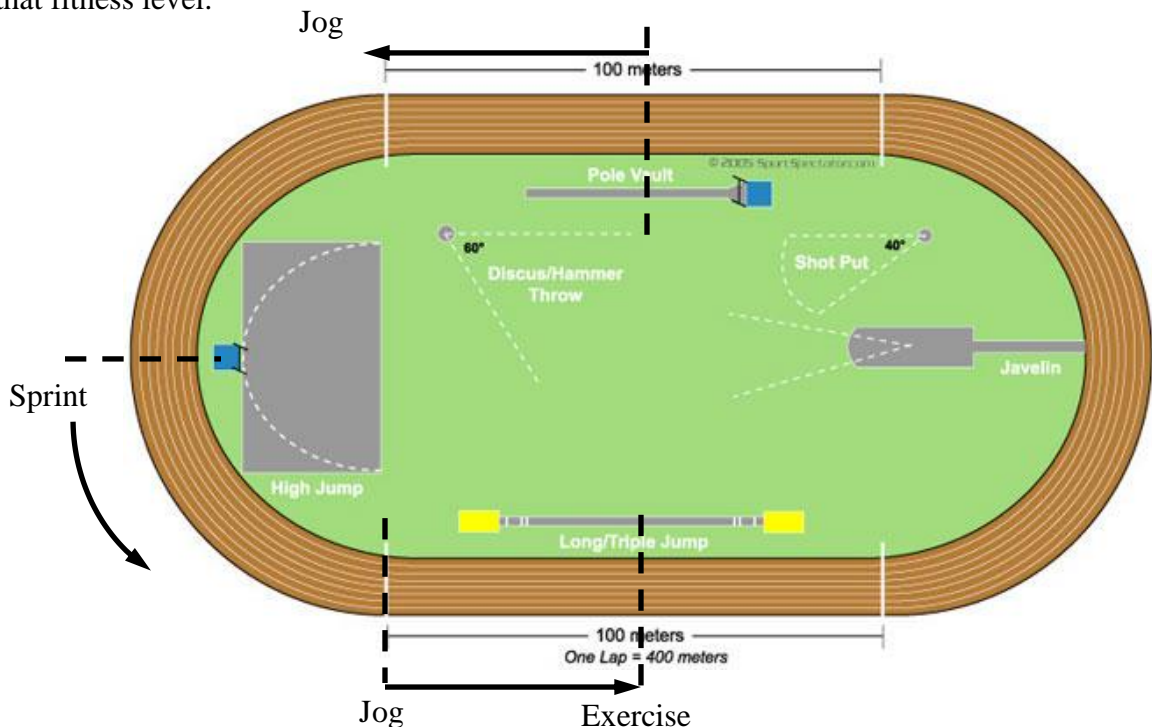


- i. 6 x 20 meter sprints, keeping your head down until you cross the curve intersection line.
- ii. 6 x 40 meter sprints, keeping your head down until you cross the curve merged line. This head and body position for all remaining sprints.
- iii. 6 x 60 meter sprints.
- iv. 2 x 80 meter sprints.
- v. 1 x 100 meter sprints. This is optional, although as you get fitter, after four weeks, this can be added in.
- vi. 2 x 80 meter sprints.
- vii. 6 x 60 meter sprints.
- viii. 6 x 40 meter sprints.
- ix. 6 x 20 meter sprints.
- x. Finish with a slow single lap of the running track.

5 FARTLEKKING

Fartlek is a Scandinavian word meaning "speed play." The exercise is unstructured and allows you to sprint, run, and walk over varied terrain. Rugby Fartleks, however, are a bit more structured.

Use a High School or College 440 yard track. Starting at the middle of one straightaway jog to the middle of the first turn (110 yards). Sprint through the rest of the turn (55 yards) and jog to the middle of the straightaway (55 yards). At this point an exercise is performed (10 jumping jacks, 10 pushups, 10 star jumps, or 10 sit-ups, rotating through). Following the exercise the jog-sprint-jog is continued to the next straightaway and exercise. Once through all four exercise stations is one-half mile. Keep it up for at least 30 minutes. 60 minutes is even better, once you get to that fitness level.



6 LONG SLOW DISTANCE (LSD)

This is what everyone thinks of as jogging. LSD by itself will not get you fit enough to play Rugby! It is useful to build a good aerobic base upon which all other training is based. Shoot for 30 to 40 minutes (or more) of running at an enjoyable pace. It is especially useful for spreading out and eliminating the lactic acid built up during a match (hence its use on Sundays). The Sunday runs may be as little as 15 to 20 minutes. At no time, however, should LSD be considered a realistic substitute for any other training activity given in this Program. The "guts" of this Program are the Intervals and the Fartleks. You need to do them (religiously) in order to get the benefit!

7 RUGBY-SPECIFIC PLYOMETRICS

Plyometrics require a complete warm-up (high knee marching, stretching, skipping, lunging, slow running with exaggerated movements, etc.). They are not high intensity/long duration exercises (like sprints). They are more like explosive, ballistic, maximum power exercises with a fairly long recovery time in between. We need to focus on quality of the exercise rather than quantity. The recovery time is necessary to allow your body to replenish the creatine phosphate energy system. If you do not allow recovery time, you are dipping into the lactic acid cycle and, eventually, the aerobic system. Neither of these produces the power we are seeking. (Be sure to warm-down at the end of the session, too.)

This means that there is a lot of "down time" when doing plyometrics. This is OK! Do them on days when you won't be running much-- maybe in conjunction with upper-body weight lifting/strength training - as they focus on leg work. Use the down time for mental rehearsal and imagery of what you will be doing next Saturday on the Rugby pitch!

This program is only suggestive. It involves about "400 foot contacts" (that's a lot!) through various plyometric exercises (do not count warm-up exercises as "foot contacts"). You can alter the composition of the program, but do not exceed the 400 foot contacts. Work to rest ratio means the ratio between the time it takes to complete a sets of repetitions and the rest time between sets.

7.1 Depth Jump with 180 Degree Turn:

Jump/step off of a bench (18" high or more), land on both feet, immediately jump as high as you can turning 180 degrees and land on both feet. Repeat. Alternate direction of turn with each repetition. Increase the difficulty by jumping up onto another bench or box (not really necessary, though). Perform 10 sets of 4 with a work to rest ratio of 1:5 or 1:10 to allow complete muscle recovery between sets (i.e.- if you perform 4 jumps in 20 seconds, rest for 100 to 200 seconds-- 1.5 to 3 minutes-- between sets).

40 foot contacts



7.2 Depth Jump with 360 Degree Turn:

Same, but increase power of turn so that you go 360 degrees. Perform 10 sets of 4 with work to rest ratio of 1:5 or 1:10.

40 foot contacts

7.3 Pyramiding Box Hops:

Set up three benches, boxes, stools, chairs, etc. (18" high) two to three feet apart. Start from the ground hopping up (swinging both arms at same time) onto the bench/box, then the ground, then the next bench/box, then the ground, etc., walk back to the start. Perform 10 sets of 4, work to rest of 1:5 or 1:10.

120 foot contacts

7.4 Barrier Hops:

Set up three hurdles (can be anything), 18" to 24" high. Hop over each in line. Walk back to beginning. Perform 10 sets of 4.

120 foot contacts

7.5 Alternate Bounding:

This is actually an exaggerated running action. Begin with a short (10 yard) jog to get up to speed. At the starting line begin "bounding," pushing off hard with each step. The trailing leg should be extended, the knee bent (kick up your heels), and the leading leg extended as far forward as possible before landing without "braking" your momentum.. Go as far as possible and stay in the air as long as possible with each step. Bound 10 steps and walk back to the beginning. Perform 8 repetitions.

80 foot contact.

7 MINUTE PLYOMETRIC WORKOUT - SQUAT JUMPS

Having a hard time getting into the gym? Can't afford a membership? Are you on vacation? You can get a good leg workout without having to go to the gym and all you need are.... working legs. I set up a short workout using a plyometric movement called the squat jump so that you can workout whenever and wherever.

If you look at the picture on the right, down below you can see the basic movement you'll be doing.

I like to do them with your arms in that "prisoner" position to take the "arm swing" out of your jump and really focus all the work on your legs.

In theory, this workout will help you with your endurance strength, give you gains in explosive power, spark new muscle growth and help you lose weight.

Help you lose weight?

Yes, I set it up in a way so that it will be a short interval workout. This isn't a common form of "cardio" but this interval workout will definitely help you burn fat.



The Basic Movement

Let's practice the basic movement a couple times, it's pretty simple.

1. Put your hands behind your head like you're being arrested, as shown in the picture. Don't worry, working out isn't a crime.
2. Now squat down until the top of your thighs are parallel to the floor or until you feel the bottom of your thighs touch your calves.
3. As soon as you squat down, you'll want to jump up in an explosive movement so that your legs straighten and your feet leave the floor a little bit. Make sure you keep your hands behind your head the whole time and that, as you squat down, you're keeping your back pretty straight up and down.
4. As soon as you land you'll want to go straight back down into the squat position and jump again.

Practice that a couple times so that you can complete it quickly.

You'll need to do these fast, but with good form, to track your progress with this workout. They have to be done quickly so that you can take advantage of the "spring effect" you get by quickly stretching your muscle.

When you drop down low into the squat you stretch your muscle, which stores elastic energy, and then you quickly jump back up, which allows you to jump even higher because of a spring-like effect of your stretched muscle.

Alright, got the movement down? Let's move on.

The Workout

What you're going to want to do is get a watch with a countdown timer on it or you can even use an egg timer or your microwave. You just want something that you can set up to count down a minute and then set off an alarm so that you know when to stop.

You'll want a piece of paper and pen near you and probably a drink.

You're going to do 4 sets of squat jumps. Your sets will be a minute long and you'll have a minute of rest in between each set.

So you'll start the timer and immediately start doing squat jumps when the timer starts. You want to do them fast but make sure that you're doing the full movement.

MAKE SURE THAT YOU COUNT OUT YOUR REPS; this is how you're going to track your progress.

Do a minute straight of squat jumps, counting out your reps. When the alarm goes off, stop jumping and start the timer again.

You've got a minute to write down the number of squat jumps you did and to get a drink if you need one.

Once the alarm sounds again, your "break" is over. You'll have to set the timer again and start doing squat jumps. Count them out and feel the burn! Do them as fast as you can, but if you need a SHORT breather during your set, then take one.

You'll want to do that four times and that's it. That took seven measly minutes and I'm willing to bet that your legs are cooked. The first time I did this workout, my legs ached for a few days.

Pain is progress folks.

This is an intense workout, so try it once and then decide if you need to make any changes (like maybe dropping a set) to better suit you.

You don't need to do a workout like this everyday, have some variety in your workouts. Do this once every other week if you can handle it, or even once a month like I'm going to do. Just add this to your arsenal of workouts.

I do my squat jumps out in my garage and I put a foam pad down to help absorb some shock to save my knees.

I usually do some pushups and pull-ups after I do squat jumps, so I can have more of a full body workout, but that's up to you.

You CAN get a good workout using just your body weight and it doesn't have to be overly long. Now try this out and tell me how much you hate me in a comment because your legs hurt so much.

Care to Compete?

As I said before, I've done this workout; I don't make up workouts and then never try them myself. This one really fires up your legs! So let's have a friendly competition. Once you've tried this workout, post your results in a comment. Don't be shy, for all I know, you're better than me at them! Here's what you need to post:

- The DATE you did the workout
- Your AGE and GENDER
- Your HEIGHT and WEIGHT
- # of squat jumps completed each set
- Total # of squat jumps completed in the 4 minutes of intervals you did (add the totals from each set together)
- Did you like the workout?
- Will you do it again?

Here are my results after doing this workout the first time:

July 2nd, 2007

25 year old Male, 6'3" and was around 243lbs

33 squat jumps in the first set,
27 squat jumps in the 2nd set,
24 squat jumps in the 3rd set and
23 squat jumps in the 4th set.

So that's 107 squat jumps for the whole workout.

I did like this workout, even though my legs hurt for the next couple days, but just means I worked my muscles in a way they're not use to. I will be doing this workout again soon.

July 30th, 2007:

25 year old Male, 6'3" and was around I was around 228lbs

42 squat jumps in the first set,

33 in the 2nd,

31 in the 3rd and

29 in the last set.

So that's 135 squat jumps total (I beat my last record by 28 reps overall).

My legs didn't hurt as bad this time after I did them, so that's a relief.