



Matt Greene
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University of Idaho

presents

BASEBALL CONDITIONING PROGRAM
REGARDLESS OF SPACE, FACILITIES OR
EQUIPMENT

SPECIAL ACKNOWLEDGEMENTS:
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Program Layout

- Meet three times a week, outside of normal baseball activities, practices or games.
- **Monday: Weight training**
- **Tuesday: Speed and Agility**
- **Wednesday: Off day**
- **Thursday: Weight training/speed agility/crossfit**
- Crossfit was utilized while on road trips, or when lacking in time, or equipment. It was also incorporated with Thursday workouts every other week.
- Program was designed utilizing periodization phases, manipulation of weight, repetition and percentage of 1 rep maximums.
 - * Phase 1– Add Muscle Mass, Rep Range: 8-10 at 75-80% of their 1 RM for each lift
 - * Phase 2– Add Strength Rep Range: 5-8 at 80-90% of their 1 RM for each lift
 - * Phase 3– Add Maximal Strength Rep Range: 3-5 at 90-95% of their 1 RM for each lift
- Program is built around four core lifts: Bench Press, Squat, Deadlift, Incline Bench Press

Program Layout

- Athletes are split into four groups. (A1, A2, B1, B2)
- Athletes are given 12-10 minutes to complete 3 sets of each lift, at rep ranges pertaining to the specific periodization the program is currently at and then move onto the next sequenced lift.
- In between each 12-10 minute bout, athletes complete a specific auxiliary exercise(s) targeting (Abdominals Biceps, Triceps, Chest, Deltoids) for 2-3 minutes.
- Entire length of weight training is just under one hour.

Monday - Muscle Mass - Periodization 1			
Exercise	Groups	Set/Rep	Time
Squat	A1	4 x 8-10 @ 75-80%	12 min
ABS (Variety)	All	4 x 30 sec.	2 min
Bench	A2	4 x 8-10 @ 75-80%	10 min
Bicep / Tricep / Rest	All	2 x 30 sec. (3 rot)	3 min
Dead / Clean	B1	4 x 8-10 @ 75-80%	10 min
Push up / Deltoids / Rest	All	2 x 30 sec. (3 rot)	3 min
Incline	B2	4 x 8-10 @ 75-80%	10 min
Burnout: Core strengthening exercises	All	2 x 1 min (2 diff.)	2 min

Layout of Monday weight training day

Program Layout

- Speed and agility was completed twice a week.
*Monday and Thursday
- Methodology used was to create authentic game like situations.
- Sprints were done after athletes assumed their base running stance, which they would use during a game.
- Instead of using a “Go” command, sprints were initiated by a coach who would imitate a pitcher initiating his delivery.
- Athletes would then read a secondary coach for a down or up cue. If the coach was down, they proceeded with the sprint, if the coach was up, they would retreat to the starting position, in the same manner they would during a game.
- During body coordination and agility skills, athletes were told to act as if they were tracking a fly ball or ground ball. Instead of working through these drills with their heads down, they were forced to “track” the ball.



Program Results

Bench Press		Deadlift		Squat		Incline Bench Press	
Pre	Post	Pre	Post	Pre	Post	Pre	Post
146.67	161.20	212.57	222.7	148.78	167.4	105.55	126
	9.4% gain		4.6% gain		12.0% gain		17.7% gain



- Coaches observed pitchers were able to maintain a set velocity longer throughout games
- Fielders made stronger throws than observed during pre-season try outs
- Players remarked that they felt stronger and possessed more power while hitting
- Increased explosiveness in all aspects of the game was observed

Base Running Improvement

Player	Summer 2013	Summer 2014
Stolen Bases		
1	8	47
2	5	22
3	4	5
4	1	6
5	11	22



- Athletes attributed improvement in base running statistics to speed and agility training protocol
- These five athletes were on our team prior to implementing our program, and all improved upon their statistics from the previous year

Research Demura & Miyahuchi (2012) showed that it is wise for baseball players to develop bench press power with a combination of light and maximal loads to increase hitting power.

- Basis for our periodization phases

Farrow and Young (2013) found that the best way to train an athlete for agility is involve the most authentic, specific sport situations as possible.

- Basis for our speed and agility training methods

Newton and McEvoy (1998) showed that ballistic explosive training can make a significant impact on throwing velocity and base running speed.

- Basis for Crossfit and auxiliary exercises

Pastiglione (2014) found that baseball players can increase throwing velocity by upper body training prior to the start of a season.

- Basis for inclusion of incline bench press

Smith (2013) found that a well-planned and executed crossfit program can have great improvements on VO₂ max and body composition. However, the safety training needed is more extensive than traditional weight lifting programs.

- Basis for inclusion of crossfit workouts

Otto (2012) advises that kettlebells be included in weight lifting programs specifically for explosive movements or when adding weight to cardio but not to be used exclusively.

- Basis for inclusion of kettlebell exercises as an auxiliary exercise

Simao (2012) showed that programs with nonlinear periodization that uses rep ranges 12-15, 8-10, and 3-5 showed to have more muscle growth than straight linear periodization.

- Basis for periodization phases

Page (1993) found that incorporating resistance band training and light weight dumbbell rotator cuff exercises are the best way to prevent shoulder and arm injuries experienced by baseball players.

- Basis for inclusion of auxiliary exercises, especially band work and deltoid exercises

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