

Building the Perfect Beast

Developing a Complete Strength and Conditioning Program for Your Throws Athlete

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Strength and conditioning is always one of the most popular topics with throws coaches. Most “games” such as football, basketball, volleyball and soccer have elements of strategy to them that we might call X’s and O’s. However, the X’s and O’s of track and field are training our athletes to be prepared for their best performances on meet day. So, it follows that the elements of strength and conditioning are such hot topics at clinics, camps, around the throws ring.

The information here is just comes from my experiences as a high school and collegiate coach. I do not profess to have all the answers to developing a complete training program. My training for my athletes is always a work in progress. If you ask successful throws coaches all over the country how they prepare their athletes you would get 100 different answers. However, there are a few similarities in the very successful programs as I can see them.

1. High Work Ethic-Everyone In The Program Works Hard
2. Follow The Magic of Progressive Training Loads
3. Rest and Recovery are Major Parts of the Program
4. The Athletes Believe That They are Going to Get Better
5. They All Have Talented Athletes. Let’s Be Real. GREAT ATHLETES MAKE GREAT COACHES!

I. Develop a Philosophy for Your Strength and Conditioning Program

- A. Safety
- B. Technique
- C. Development
- D. Achievement
- E. Success

II. Where to Start?

- A. Event Demands
- B. Program Demands
- C. Facilities & Equipment Available

III. Planning-Developing a Yearly Plan (Three Training Phases)

- A. Preparation Phase (General Training)
- B. Precompetition Phase (Transition)
- C. Competition Phase
- D. Training Cycles (4 Week Cycles)
 1. Three Weeks of Progressive Training
 2. One Week of Recovery (30 to 50% of Volume)
 3. Return to training levels at or above level of training in third week of last cycle.
 4. Rest is the key to performance improvements
 5. The body adapts to training during rest.

IV. Strength and Conditioning (Three Areas)

- A. Weight Room Training
 - 1. Power Development (Explosive Movements)
 - 2. Muscular Strength and Hypertrophy
- B. Specific Event Strength
 - 1. Overweight Implements
 - 2. Underweight Implements
- C. Jump Training (Plyometrics)
 - 1. Sprint Training
 - 2. Complex Training (Medicine Ball, Multi-Throws, Circuits)
 - 3. Motor Skill Training
 - 4. Flexibility (Static and Dynamic)

V. Putting It All Together

1. General Preparation Phase

- a. **Throwing.** Emphasis on drills and can incorporate some heavy implements in training.
- b. **Plyometrics.** Low Level 1 to 2 times a week.
- c. **Sprinting.** One day absolute speed, one day long sprints. Short Recoveries. Speed ladders, coordination drills, cones, etc. are good on these days as well.
- d. **Medicine Ball.** Routines with simple passing, dynamic flexibility routines, bodyweight circuits. 2 times a week. Static Flexibility to be done two or three times a week. Some explosive work with med balls, throwing pads, kettle bells, etc.
- e. **Strength Training.** 2 to 5 times a week. Anatomical Adaptation Phase with muscle hypertrophy. 6 to 12 reps, power exercises in 4's, 5's, 6's.

2. Precompetition Phase

- a. **Throwing.** Work in more full movements and increase specific strength work...high volume.
- b. **Plyometrics.** Increase intensity and explosiveness of movements but reduce volume. 1 to 2 times a week
- c. **Sprinting.** More intensity, longer recoveries, start to reduce volume. Can work in some strength cycles in here with towing, etc. Reduce coordination drills, cones, etc. as you are becoming more specific in coordination drills in the ring.
- d. **Medicine Ball.** More Explosive routines, less volume. 2 times a week. Dynamic Flexibility and Static Flexibility 2 times a week. Bodyweight circuits, etc. 1 time a week.
- e. **Strength Training.** 2 to 5 times a week. Start transition to fewer reps and move to higher intensities. Reduce complex movements and concentrate on moving more weight. Sets of 5's, 4's, and combinations of these. Still maintain some hypertrophy movements.

3. Competition Phase

- a. **Throwing.** Reduce Drills but not all, reduce volume somewhat but don't take out specific strength routines.
- b. **Plyometrics.** Most intense workouts and combine with multi-throws. 1 time a week.
- c. **Sprinting.** Most intense workouts with long recoveries. Can mix with speed ladders and coordination drills but not too much because it confuses the nervous system. 1 time a week.
- d. **Medicine Ball.** Medicine Balls, Dynamic Flexibility, Body Weight Circuits. 1 to 2 times a week. Helps nervous system recover and are great recovery day activities. Static stretching should be done every two to three times a week.
- e. **Strength Training.** 2 to 5 times a week. Volume decreases and intensities increase. Lower rep schemes such as 3x3--4,3,2,1--1,2,3,4 etc. are all possible scenarios. It seems that young athletes can not spend too many weeks in these intense workouts without overloading their nervous system and actually detraining. Higher training age seems to elicit more response from extended periods in these types of routines.

4. Peaking

- a. Men-Two weeks out from most important meet do most intense workout. Might be a max day in weight room or some other testing. Then, 70% of volume and intensity going in to the competition.
- b. Women-Seven days out from major competition do most intense workout. Then, 70% volume and intensity going into that meet or meets.
- c. Don't outsmart yourself. If athletes are in a great place, throwing PR's and feeling good keep on doing what you are doing.
- d. I often let my athletes move heavy loads in peak times but keep the volume very low. This, to me is often as Psychological as Physiological. Many athletes need to feel strong in the weight room to feel strong in the ring.
- e. Be careful about dropping volume to low or intensity to low. The nervous system may shut down a little as it does sometimes in recovery weeks.
- f. It may sound controversial but I think that athletes can hold their peak up to six weeks. Two to three weeks seems to be what the literature says but I have witnessed many athletes stay in the zone of a peak for up to six weeks.

Sample Training Menus

Dynamic Flexibility

(Hurdle Flexibility)
Over and Unders
Alternate Walk-Overs
Sidekicks
Over and Back
Rotational

Back Eagles
Front Eagles
Single Knee Tucks
Hip Circles
Arm Circles
Sagittal Leg Swings
Frontal Leg Swings
Donkey Kicks
Leg Whips
Trail Leg Cycles

Lunge Exchange
Side Lunge Exchange
Roll-Rollback
Double Knee Tucks
Single Arm Circles
Hurdle Trail Leg Cycles
Hurdle Seat Exchange

Strength and Power Circuits

Skipping x 50m
Push-ups x 10
Prisoner Squats
Sprint x 50m
Burpees x 10
Farmer's Carry x 20, 30, 40m

Jump Rope x1 min
Push-ups x 10
Lunge Walk x 20m
Decline Push-Up x 10
Sprints x 50m
Med. Ball Overhead Squat

Overhead Throw-Chase
Underhand Throw-Chase
Squat Chest Throw-Chase

All circuits can be timed or done for a certain number of reps. Throw circuit is usually done with med balls.

Medicine Ball Routines

Partner Rotation
Torso Circles
Over-Under Pass
3 Way Hammer
Good Mornings
Back Hypers
Partner Give and Take
Leg Lifts
Arm Lifts
**Strength and Flexibility Routine*

Chest Pass
Overhead Pass
Twist Over
Squat Chest
Partner Drop
Seated Hip
Prone Pass Chest
**Explosive Routine*

Single Leg Chest
Single Leg Overhead
Shoulder Single Leg Hip
Double Leg Chest
Double Leg Overhead
Double Leg Hip
Prone Pass Overhead
**Stability Routine*